Index of Authors and Titles

ADAMS, D. S., KELLER, R. and KOEHL, M. A. R. The mechanics of notochord elongation, straightening and stiffening in the embryo of *Xenopus laevis* 115

ADLER, R. R., BRENNER, C. A. and WERB, Z. Expression of extracellular matrix-degrading metalloproteinases and metalloproteinase inhibitors is developmentally regulated during endoderm differentiation of embryonal carcinoma cells 211

AGATA, A. See TANAKA, H.

AKAM, M. See TEAR, G.

AKHURST, R. J. See GATHERER, D.

ALBANO, R. M., GODSAVE, S. F., HUYLEBROECK, D., VAN NIMMEN, K., ISAACS, H. V., SLACK, J. M. W. and SMITH, J. C. A mesoderm-inducing factor produced by WEHI-3 murine myelomonocytic leukemia cells is activin A 435

ALBERTS, B. M. See SULLIVAN, W.

ALCIVAR, A. A. See HAKE, L. E.

ALTMANN, G. G. and QUARONI, A. Behavior of fetal intestinal organ culture explanted onto a collagen substratum 353 AMALRIC, F. See BIGGIOGERA, M.

ANDERSON, M. J. See SWENARCHUK, L. E.

ANDERSON, R. See FRANKS, R. R.

ANNERWALL, E. See DENCKER, L.

ANTCZAK, D. F. See DONALDSON, W. L.

AUSONI, S. See SAGGIN, L.

AUSTIN, C. P. and CEPKO, C. L. Cellular migration patterns in the developing mouse cerebral cortex 713

BACHVAROVA, R. F. See MANOVA, K.

BAETGE, G., SCHNEIDER, K. A. and GERSHON, M. D.
Development and persistence of catecholaminergic
neurons in cultured explants of fetal murine vagus nerves
and bowel 689

BAIRD, D. T. See GATHERER, D.

BASSEZ, T., PARIS, J., OMILLI, F., DOREL, C. and OSBORNE, H. B.
Post-transcriptional regulation of ornithine decarboxylase in *Xenopus laevis* oocytes 955

BASS, M. B. See METCALFE, W. K.

BATE, M. The embryonic development of larval muscles in Drosophila 791

BEAUCHEMIN, N. See HUANG, J. Q.

BEMENT, W. M. See SMITH, R. C.

BENNETT, D. C., HUSZAR, D., LAIPIS, P. J., JAENISCH, R. and JACKSON, I. J. Phenotypic rescue of mutant brown melanocytes by a retrovirus carrying a wild-type tyrosinase-related protein gene 471

BERKS, M. and KAY, R. R. Combinatorial control of cell differentiation by cAMP and DIF-1 during development of Dictyostelium discoideum 977

BESMER, P. See MANOVA, K.

BIEBER, A. J. See HORTSCH, M.

BIGGIOGERA, M., BÜRKI, K., KAUFMANN, S. H., SHAPER, J. H., GAS, N., AMALRIC, F. and FAKAN, S. Nucleolar distribution of proteins B23 and nucleolin in mouse preimplantation embryos as visualized by immunoelectron microscopy 1263

BIGIONI, N. See TUAN, R. S.

BIRR, C. A., FRISTROM, D., KING, D. S. and FRISTROM, J. W. Ecdysone-dependent proteolysis of an apical surface glycoprotein may play a role in imaginal disc morphogenesis in *Drosophila* 239

BISHOP, J. M. See KATZEN, A. L.

BODMER, R., JAN, L. Y. and JAN, Y. N. A new homeoboxcontaining gene, msh-2, is transiently expressed early during mesoderm formation of Drosophila 661

BOLCE, M. E. See HEMMATI-BRIVANLOU, A.

BOOTSMA, D. See VAESSEN, M.-J.

BOYLE, M. See FROHMAN, M. A.

BRAUER, P. R., KELLER, K. M. and KELLER, J. M. Concurrent reduction in the sulfation of heparan sulfate and basement membrane assembly in a cell model system 805

BREITMAN, M. L. See YU, C-K. C.

BRENNER, C. A. See ADLER, R. R.

BRIGSTOCK, D. R. See CORPS, A. N.

BRITTEN, R. J. See FRANKS, R. R.

BRITTEN, R. J. See HOUGH-EVANS, B. R.

BROWN, K. D. See CORPS, A. N.

BROWN, N. A., McCARTHY, A. and WOLPERT, L. The development of handed asymmetry in aggregation chimeras of situs inversus mutant and wild-type mouse embryo 949

BROWN, R. D. See HEMMATI-BRIVANLOU, A.

BRÛLET, P. See LALLEMAND, Y.

BRUNS, C. See MACKIE, E. J.

bürki, k. See biggiogera, m.

BUSCH, C. See DENCKER, L.

CAMPOS-ORTEGA, J. A. See HAENLIN, M.

CANDE, W. Z. See SYLVESTER, A. W.

CAPCO, D. G. See SMITH, R. C.

CARTERET, C. See SIMPSON, P.

CASANOVA, J. Pattern formation under the control of the terminal system in the *Drosophila* embryo 621

CASANOVA, J. See MACÍAS, A.

CEPKO, C. L. See AUSTIN, C. P.

CHAMBON, P. See DOLLÉ, P.

CHAMPANERIA, S. See SWENARCHUK, L. E.
CHARLEBOIS, T. S., HENRY, J. J. and GRAINGER, R. M.
Differential cytokeratin gene expression reveals early
dorsal-ventral regionalization in chick mesoderm 417

CHARPENTIER, G. and MAGRE, S. Masculinizing effect of testes on developing rat ovaries in organ culture 839

CHEN, H. M. See CHUONG, C.-M.

CHIQUET, M. See WEHRLE, B.

CHOWDHURY, K. See PLACHOV, D.

CHUONG, C.-M., OLIVER, G., TING, S. A., JEGALIAN, B. G., CHEN, H. M. and DE ROBERTIS, E. M. Gradients of homeoproteins in developing feather buds 1021

COMPER, W. D. See NEWMAN, S. A.

CONNELLY, P. S. See TILNEY, L. G.

COOKE, T. J. See TILNEY, L. G.

CORKE, F. M. K. See HAUXWELL, A. J.

CORPS, A. N., BRIGSTOCK, D. R., LITTLEWOOD, C. J. and BROWN, K. D. Receptors for epidermal growth factor and insulin-like growth factor-I on preimplantation trophoderm of the nig 221

DANIELS, E. See HUANG, J. Q.

DANIEL, J. See KWONG, L.

DAVIDSON, E. H. See FRANKS, R. R.

DAVIDSON, E. H. See HOUGH-EVANS, B. R.

DAVIES, A. M. See HARPER, S.

DE GRAAF, W. See VOGELS, R.

DE ROBERTIS, E. M. See CHUONG, C.-M.

DEL PINO, E. M. and LOOR-VELA, S. The pattern of early cleavage of the marsupial frog Gastrotheca riobambae 781

DENCKER, L., ANNERWALL, E., BUSCH, C. and ERIKSSON, U. Localization of specific retinoid-binding sites and expression of cellular retinoic-acid-binding protein (CRABP) in the early mouse embryo 343

DERSCH, M. A. See SMITH, R. C.

DESCHAMPS, J. See VOGELS, R.

DIAZ, E. M. See NAGY, A.

DICKINSON, M. E. See PELTON, R. W.

DODD, J. See PLACZEK, M.

DOLLÉ, P. See IZPISÙA-BELMONTE, J-C.

DOLLÉ, P., RUBERTE, E., LEROY, P., MORRISS-KAY, G. and CHAMBON, P. Retinoic acid receptors and cellular retinoid binding proteins. I. A systematic study of their differential pattern of transcription during mouse organogenesis 1133

DONALDSON, W. L., ZHANG, C. H., ORIOL, J. G. and ANTCZAK, D. F. Invasive equine trophoblast expresses conventional class I Major Histocompatibility Complex antigens 63

DOREL, C. See BASSEZ, T.

drahorad, j. *See* tesarik, j. duboule, d. *See* izpisùa-belmonte, j-c.

DUNCAN, I. D. See NADON, N. L.

DURSTON, A. J. See OTTE, A. P.

DWORKIN-RASTL, E. See SMITH, R. C.

DWORKIN, M. B. See SMITH, R. C.

EDGAR, D. See KÜCHERER-EHRET, A.

efstratiadis, a. See lee, j. e.

EKBLOM, M. See KLEIN, G.

EKBLOM, P. See KLEIN, G.

ERIKSSON, U. See DENCKER, L.

ERSELIUS, J. R., GOULDING, M. D. and GRUSS, P. Structure and expression pattern of the murine *Hox-3.2* gene 629

EVANS, D. J. See THOMPSON, E. M.

EVANS, E. P. See NICHOLS, J.

FAKAN, S. See BIGGIOGERA, M.

FALKENSTEIN, H. See IZPISÙA-BELMONTE, J-C.

FECKER, L. See KLEIN, G.

FLANDERS, D. J., RAWLINS, D. J., SHAW, P. J. and LLOYD, C. W. Re-establishment of the interphase microtubule array in vacuolated plant cells, studied by confocal microscopy and 3-D imaging 897

FLEMING, K. A. See THOMPSON, E. M.

FRANKS, R. R., ANDERSON, R., MOORE, J. G., HOUGH-EVANS, B. R., BRITTEN, R. J. and DAVIDSON, E. H. Competitive titration in living sea urchin embryos of regulatory factors required for expression of the CyIIIa actin gene 31

FRANKS, R. R. See HOUGH-EVANS, B. R.

FRANK, D. See HEMMATI-BRIVANLOU, A.

FREELING, M. See SYLVESTER, A. W.

fristrom, d. See birr, c. a.

FRISTROM, J. W. See BIRR, C. A.

FROHMAN, M. A., BOYLE, M. and MARTIN, G. R. Isolation of the mouse *Hox-2.9* gene; analysis of embryonic expression suggests that positional information along the anterior—posterior axis is specified by mesoderm 589

FUJIMORI, T., MIYATANI, S. and TAKEICHI, M. Ectopic expression of N-cadherin perturbs histogenesis in *Xenopus* embryos 97

FUJISUE, M. See YUGE, M.

FUJITA, S. See ICHIJO, H.

FUNDELE, R. See THOMPSON, E. M.

GAS, N. See BIGGIOGERA, M.

GATHERER, D., TEN DIJKE, P., BAIRD, D. T. and AKHURST, R. J. Expression of TGF- β isoforms during first trimester human embryogenesis 445

GERSHON, M. D. See BAETGE, G.

GHERARDI, E. See STERN, C. D.

GINSBURG, M., SNOW, M. H. L. and McLAREN, A. Primordial germ cells in the mouse embryo during gastrulation 521

GIRALDEZ, F. See REPRESA, J.

GLOVER, D. M. See RAFF, J. W.

GÓCZA, E. See NAGY, A.

GODSAVE, S. F. See ALBANO, R. M.

GOODMAN, C. S. See HORTSCH, M.

GORZA, L. See SAGGIN, L.

GOULDING, M. D. See ERSELIUS, J. R.

GOULD, A. P., LAI, R. Y. K., GREEN, M. J. and WHITE, R. A. H. Blocking cell division does not remove the requirement for *Polycomb* function in *Drosophila* embryogenesis 1319

GRAINGER, R. M. See CHARLEBOIS, T. S.

GRAY, J. See STERN, C. D.

GREEN, M. J. See GOULD, A. P.

GRUNEWALD, B. See LEPTIN, M.

GRUSS, P. See ERSELIUS, J. R.

GRUSS, P. See PLACHOV, D.

GUENET, J.-L. See PLACHOV, D.

HAENLIN, M., KRAMATSCHEK, B. and CAMPOS-ORTEGA, J. A. The pattern of transcription of the neurogenic gene Delta of Drosophila melanogaster 905

HAHNEL, A. C., RAPPOLEE, D. A., MILLAN, J. L., MANES, T., ZIOMEK, C. A., THEODOSIOU, N. G., WERB, Z., PEDERSEN, R. A. *and* SCHULTZ, G. A. Two alkaline phosphatase genes are expressed during early development in the mouse embryo 555

HAKE, L. E., ALCIVAR, A. A. and HECHT, N. B. Changes in mRNA length accompany translational regulation of the somatic and testis-specific cytochrome c genes during spermatogenesis in the mouse 249

HARLAND, R. M. See HEMMATI-BRIVANLOU, A.

HARPER, S. and DAVIES, A. M. NGF mRNA expression in developing cutaneous epithelium related to innervation density 515

HARVEY, M. B. and KAYE, P. L. Insulin increases the cell number of the inner cell mass and stimulates morphological development of mouse blastocysts in vitro 963

HAUXWELL, A. J., CORKE, F. M. K., HEDLEY, C. L. and WANG, T. L. Storage protein gene expression is localised to regions lacking mitotic activity in developing pea embryos. An analysis of seed development in *Pisum sativum* XIV 283

HAYES, W. P. and LOH, Y. P. Correlated onset and patterning of proopiomelanocortin gene expression in embryonic *Xenopus* brain and pituitary 747

HEASMAN, J. See TORPEY, N. P.

HECHT, N. B. See HAKE, L. E.

HEDLEY, C. L. See HAUXWELL, A. J.

HEIKKILA, J. J. See OVSENEK, N.

HEMMATI-BRIVANLOU, A., FRANK, D., BOLCE, M. E., BROWN, R. D., SIVE, H. L. and HARLAND, R. M. Localization of specific mRNAs in *Xenopus* embryos by whole-mount in situ hybridization 325

HENRY, J. J., WRAY, G. A. and RAFF, R. A. The dorsoventral axis is specified prior to first cleavage in the direct developing sea urchin Heliocidaris erythrogramma 875

HENRY, J. J. See CHARLEBOIS, T. S.

HERRICK, S. E. See STERN, C. D.

HIDALGO, A. and INGHAM, P. W. Cell patterning in the Drosophila segment: spatial regulation of the segment polarity gene patched 291 HOFFMAN, F. M. See REUTER, R. HOFFMAN, F. M. See PANGANIBAN, G. E. F.

HOGAN, B. L. M. See PELTON, R. W.

HONDA, H., TANEMURA, M. and YOSHIDA, A. Estimation of neuroblast numbers in insect neurogenesis using the lateral inhibition hypothesis of cell differentiation 1349

HORTSCH, M., PATEL, N. H., BIEBER, A. J., TRAQUINA, Z. R. and GOODMAN, C. S. Drosophila neurotactin, a surface glycoprotein with homology to serine esterases, is dynamically expressed during embryogenesis 1327

HOUGH-EVANS, B. R., FRANKS, R. R., ZELLER, R. W., BRITTEN, R. J. and DAVIDSON, E. H. Negative spatial regulation of the lineage specific CyIIIa actin gene in the sea urchin embryo 41

HOUGH-EVANS, B. R. See FRANKS, R. R.

HOWARD, K. R. and STRUHL, G. Decoding positional information: regulation of the pair-rule gene hairy 1223

HUANG, J. Q., TURBIDE, C., DANIELS, E., JOTHY, S. and BEAUCHEMIN, N. Spatiotemporal expression of murine carcinoembryonic antigen (CEA) gene family members during mouse embryogenesis 573

HUDSON, L. D. See NADON, N. L.

HUSZAR, D. See BENNETT, D. C.

HUYLEBROECK, D. See ALBANO, R. M.

ICHIJO, H., FUJITA, S., MATSUNO, T. and NAKAMURA, H. Rotation of the tectal primordium reveals plasticity of target recognition in retinotectal projection 331

IHARA, S., MOTOBAYASHI, Y., NAGAO, E. and KISTLER, A. Ontogenetic transition of wound healing pattern in rat skin occurring at the fetal stage 671

INGHAM P. W. See HIDALGO, A.

INGHAM, P. W. See PHILLIPS, R. G.

IRELAND, G. W. See STERN, C. D.

ISAACS, H. V. See ALBANO, R. M.

IVÁNYI, E. See NAGY, A.

IZPISÙA-BELMONTE, J-C., DOLLÉ, P., RENUCCI, A., ZAPPAVIGNA, v., FALKENSTEIN, H. and DUBOULE, D. Primary structure and embryonic expression pattern of the mouse Hox-4.3 homeobox gene 733

JACKSON, I. J. See BENNETT, D. C. JAENISCH, R. See BENNETT, D. C. JAN, L. Y. See BODMER, R. JAN, Y. N. See BODMER, R. JEACOCK, M. K. See PULLAR, D. JEGALIAN, B. G. See CHUONG, C.-M. JESSELL, T. See PLACZEK, M. JOTHY, S. See HUANG, J. Q.

KATZEN, A. L., KORNBERG, T. and BISHOP, J. M. Diverse expression of dsrc29A, a gene related to src, during the life cycle of Drosophila melanogaster 1169

KAUFMANN, S. H. See BIGGIOGERA, M.

KAUFMAN, M. H. and WEBB, S. Postimplantation development of tetraploid mouse embryos produced by electrofusion

KAYE, P. L. See HARVEY, M. B.

KAY, R. R. See BERKS, M.

KELLER, J. M. See BRAUER, P. R.

KELLER, K. M. See BRAUER, P. R.

KELLER, R. See ADAMS, D. S.

KELLEY, D. B. See MARIN, M. L.

KIMMEL, C. B. See METCALFE, W. K.

KING, D. S. See BIRR, C. A.

KINUTANI, M. See TANAKA, H.

KISTLER, A. See IHARA, S.

KLEIN, G., EKBLOM, M., FECKER, L., TIMPL, R. and EKBLOM, P. Differential expression of laminin A and B chains during development of embryonic mouse organs 823

KLEIN, W. H. See TOMLINSON, C. R.

KNIGHT, J. K. and RAYMOND, P. A. Time course of opsin expression in developing rod photoreceptors 1115

KOBAYAKAWA, Y. See YUGE, M.

KOEHL, M. A. R. See ADAMS, D. S.

KORNBERG, T. See KATZEN, A. L.

KOZLOWSKI, M. T. See TOMLINSON, C. R.

KRAMATSCHEK, B. See HAENLIN, M.

KRAMER, I. M. See OTTE, A. P.

KREUTZBERG, G. W. See KUCHERER-EHRET, A.

KRIEG, P. See VIZE, P. D.

KUCERA, J. and WALRO, J. M. Treatment with β bungarotoxin blocks muscle spindle formation in fetal rats 483

KÜCHERER-EHRET, A., POTTGIESSER, J., KREUTZBERG, G. W., THOENEN, H. and EDGAR, D. Developmental loss of laminin from the interstitial extracellular matrix correlates with decreased laminin gene expression 1285

KWONG, L., XIE, Y., DANIEL, J., ROBBINS, S. M. and WEEKS, G. A Dictyostelium morphogen that is essential for stalk cell formation is generated by a subpopulation of prestalk cells 303

LACKIE, P. M., ZUBER, C. and ROTH, J. Polysialic acid and N-CAM localisation in embryonic rat kidney: mesenchymal and epithelial elements show different patterns of expression 933

LAIPIS, P. J. See BENNETT, D. C.

LAI, R. Y. K. See GOULD, A. P.

LALLEMAND, Y. and BRÛLET, P. An in situ assessment of the routes and extents of colonisation of the mouse embryo by embryonic stem cells and their descendants 1241

LAMBRECHTS, C. See OTTE, A. P.

LAZARIDES, E. See SANGIORGI, F.

LEE, J. E., PINTAR, J. and EFSTRATIADIS, A. Pattern of the insulin-like growth factor II gene expression during early mouse embryogenesis 151

LEFRÈRE, V. See PAYRE, F.

LEPTIN, M. and GRUNEWALD, B. Cell shape changes during gastrulation in Drosophila 73

LEROY, P. See DOLLÉ, P.

LEVINE, M. See WARRIOR, R.

LEWIS, J. See REPRESA, J.

LITTLEWOOD, C. J. See CORPS, A. N.

LLOYD, C. W. See FLANDERS, D. J.

LOEFFLER, M. See POTTEN, C. S.

LOH, Y. P. See HAYES, W. P.

LOOR-VELA, S. See DEL PINO, E. M.

MACDONALD, P. M. bicoid mRNA localization signal: phylogenetic conservation of function and RNA secondary structure 161

MACÍAS, A., CASANOVA, J. and MORATA, G. Expression and regulation of the abd-A gene of Drosophila 1197

MACKIE, E. J., TRECHSEL, U. and BRUNS, C. Somatostatin receptors are restricted to a subpopulation of osteoblastlike cells during endochondral bone formation 1233

MAGRE, S. See CHARPENTIER, G.

MANES, T. See HAHNEL, A. C.

MANNESSE, M. See OTTE, A. P.

MANOVA, K., NOCKA, K., BESMER, P. and BACHVAROVA, R. F. Gonadal expression of c-kit encoded at the W locus of the mouse 1057

MARDINI, B. See NÜBLER-JUNG, K.

MARIN, M. L., TOBIAS, M. L. and KELLEY, D. B. Hormonesensitive stages in the sexual differentiation of laryngeal muscle fiber number in *Xenopus laevis* 703

MARKKULA, M. See NAGY, A.

MARTINEZ-ARIAS, A. See TEAR, G.

MARTIN-MORRIS, L. E. and WHITE, K. The Drosophila transcript encoded by the β -amyloid protein precursor-like gene is restricted to the nervous system 185

MARTIN, G. R. See FROHMAN, M. A.

MATSUNO, T. See ICHIJO, H.

MATTEI, M.-G. See POHL, T. M.

McCarthy, A. See Brown, N. A.

MCLAREN, A. See GINSBURG, M.

MEIJERS, J. H. C. See VAESSEN, M.-J.

MENDOZA, C. See TESARIK, J.

METCALFE, W. K., MYERS, P. Z., TREVARROW, B., BASS, M. B. and KIMMEL, C. B. Primary neurons that express the L2/HNK-1 carbohydrate during early development in the zebrafish 491

MILBRANDT, J. See WATSON, M. A.

MILLAN, J. L. See HAHNEL, A. C.

MINDEN, J. S. See SULLIVAN, W.

MINER, C. See REPRESA, J.

MIYATANI, S. See FUJIMORI, T.

MIZUNO, T. See TAKEDA, H.

MOORE, J. G. See FRANKS, R. R.

MORATA, G. See MACÍAS, A.

MORRISS-KAY, G. See DOLLÉ, P.

MOSES, H. L. See PELTON, R. W.

MOTOBAYASHI, Y. See IHARA, S.

MULLEN, R. J. See MUSCI, T. S.

MUSCI, T. S. and MULLEN, R. J. All-or-none craniorachischisis in Loop-tail mutant mouse chimeras 229

MYERS, P. Z. See METCALFE, W. K.

NADON, N. L., DUNCAN, I. D. and HUDSON, L. D. A point mutation in the proteolipid protein gene of the 'shaking pup' interrupts oligodendrocyte development 529
 NAGAO, E. See IHARA, S.

NAGY, A., GÓCZA, E., DIAZ, E. M., PRIDEAUX, V. R., IVÁNYI, E., MARKKULA, M. and ROSSANT, J. Embryonic stem cells alone are able to support fetal development in the mouse 815 NAKAMURA, H. See ICHIJO, H.

NARDI, J. B. Expression of a surface epitope on cells that link branches in the tracheal network of *Manduca sexta* 681 NELSON, B. B. See SCHUGER, L.

NEWMAN, S. A. and COMPER, W. D. 'Generic' physical mechanisms of morphogenesis and pattern formation 1

NICHOLS, J., EVANS, E. P. and SMITH, A. G. Establishment of germ-line-competent embryonic stem (ES) cells using differentiation inhibiting activity 1341

NOCKA, K. See MANOVA, K.

NOSELLI, S. See PAYRE, F.

NÜBLER-JUNG, K. and MARDINI, B. Insect epidermis: polarity patterns after grafting result from divergent cell adhesions between host and graft tissue 1071

OBATA, K. See TANAKA, H.

OBINATA, M. See OHNEDA, O.

OHNEDA, O., YANAI, N. *and* OBINATA, M. Microenvironment created by stromal cells is essential for a rapid expansion of erythroid cells in mouse fetal liver 379

OLIVER, G. See CHUONG, C.-M.

OMILLI, F. See BASSEZ, T.

ORIOL, J. G. See DONALDSON, W. L.

OSBORNE, H. B. See BASSEZ, T.

O'SHEA, K. S. See SCHUGER, L.

OTTE, A. P., KRAMER, I. M., MANNESSE, M., LAMBRECHTS, C. and DURSTON, A. J. Characterization of protein kinase C in early *Xenopus* embryogenesis 461

OVSENEK, N. and HEIKKILA, J. J. DNA sequence-specific binding activity of the heat-shock transcription factor is heat-inducible before the midblastula transition of early *Xenopus* development 427

PANGANIBAN, G. E. F., REUTER, R., SCOTT, M. P. and HOFFMAN, F. M. A Drosophila growth factor homolog, decapentaplegic, regulates homeotic gene expression within and across germ layers during midgut morphogenesis 1041

PANGANIBAN, G. E. F. See REUTER, R.

PARIS, J. See BASSEZ, T.

PATEL, N. H. See HORTSCH, M.

PAYRE, F., NOSELLI, S., LEFRÈRE, V. and VINCENT, A. The closely related $Drosophila sry\beta$ and $sry\delta$ zinc finger proteins show differential embryonic expression and distinct patterns of binding sites on polytene chromosomes 141

PEDERSEN, R. A. See HAHNEL, A. C.

PEIRIS, D. See PULLAR, D.

PELTON, R. W., DICKINSON, M. E., MOSES, H. L. and HOGAN, B. L. M. In situ hybridization analysis of TGFβ3 RNA expression during mouse development: comparative studies with TGFβ1 and β2 609

PERRYMAN, M. See STERN, C. D.

PHILLIPS, R. G., ROBERTS, I. J. H., INGHAM, P. W. and WHITTLE, J. R. S. The *Drosophila* segment polarity gene *patched* is involved in a position-signalling mechanism in imaginal discs 105

PINTAR, J. See LEE, J. E.

PLACHOV, D., CHOWDHURY, K., WALTHER, C., SIMON, D., GUENET, J.-L. and GRUSS, P. Pax8, a murine paired box gene expressed in the developing excretory system and thyroid gland 643

PLACZEK, M., TESSIER-LAVIGNE, M., JESSELL, T. and DODD, J.
Orientation of commissural axons in vitro in response to a
floor plate-derived chemoattractant 19

POHL, T. M., MATTEI, M.-G. and RÜTHER, U. Evidence for allelism of the recessive insertional mutation add and the dominant mouse mutation extra-toes (Xt) 1153

POTTEN, c. s. and LOEFFLER, M. Stem cells: attributes, cycles, spirals, pitfalls and uncertainties. Lessons for and from the crypt 1001

POTTGIESSER, J. See KUCHERER-EHRET, A.

PRIDEAUX, V. R. See NAGY, A.

PULLAR, D., TE KRONNIE, G., PEIRIS, D., TAVERNE, N., JEACOCK, M. K., STROBAND, H. W. J. and SHEPHERD, D. A. L. Morphological and radiochemical evidence for the metabolism of exogenous proteins by the preimplantation sheep blastocyst 539

QUARONI, A. See ALTMANN, G. G.

RAFF, J. W., WHITFIELD, W. G. F. and GLOVER, D. M. Two distinct mechanisms localise cyclin B transcripts in syncytial *Drosophila* embryos 1249

RAFF, R. A. See HENRY, J. J.

RAPPOLEE, D. A. See HAHNEL, A. C.

RAWLINS, D. J. See FLANDERS, D. J.

RAYMOND, P. A. See KNIGHT, J. K.

RENFREE, M. B., ROBINSON, E. S., SHORT, R. V. and VANDEBERG, J. L. Mammary glands in male marsupials: I. Primordia in neonatal opossums *Didelphis virginiana* and *Monodelphis domestica* 385

RENUCCI, A. See IZPISÙA-BELMONTE, J-C.

REPRESA, J., SANCHEZ, A., MINER, C., LEWIS, J. and GIRALDEZ, F. Retinoic acid modulation of the early development of the inner ear is associated with the control of c-fos expression 1081

REUTER, R. See PANGANIBAN, G. E. F.

REUTER, R., PANGANIBAN, G. E. F., HOFFMAN, F. M. and SCOTT, M. P. Homeotic genes regulate the spatial expression of putative growth factors in the visceral mesoderm of Drosophila embryos 1031

ROBBINS, S. M. See KWONG, L.

ROBERTS, I. J. H. See PHILLIPS, R. G.

ROBINSON, E. S. See RENFREE, M. B.

ROSSANT, J. See NAGY, A.

ROTH, J. See LACKIE, P. M.

RUBERTE, E. See DOLLÉ, P.

RÜTHER, U. See POHL, T. M.

SADAGHIANI, B. and VIELKIND, J. R. Distribution and migration pathways of HNK-1-immunoreactive neural crest cells in teleost fish embryos 197

SAGGIN, L., GORZA, L., AUSONI, S. and SCHIAFFINO, S. Cardiac troponin T in developing, regenerating and denervated rat skeletal muscle 547

SANCHEZ, A. See REPRESA, J.

SANGIORGI, F., WOODS, C. M. and LAZARIDES, E. Vimentin downregulation is an inherent feature of murine erythropoiesis and occurs independently of lineage 85 SCHAEFER, A. W. See THOMAS, W. A.

SCHAUER, I. E. and WOOD, W. B. Early C. elegans embryos are transcriptionally active 1303

SCHIAFFINO, S. See SAGGIN, L.

SCHNEIDER, K. A. See BAETGE, G.

SCHUGER, L., O'SHEA, K. S., NELSON, B. B. and VARANI, J. Organotypic arrangement of mouse embryonic lung cells on a basement membrane extract: involvement of laminin 1091

SCHULTZ, G. A. See HAHNEL, A. C.

SCOTT, M. P. See REUTER, R.

SCOTT, M. P. See PANGANIBAN, G. E. F.

SHAO, C. and TAKAGI, N. An extra maternally derived X chromosome is deleterious to early mouse development

SHAPER, J. H. See BIGGIOGERA, M.

SHAW, P. J. See FLANDERS, D. J.

SHEPHERD, D. A. L. See PULLAR, D.

SHORT, R. V. See RENFREE, M. B.

SIMON, D. See PLACHOV, D.

SIMPSON, L. and WIESCHAUS, E. Zygotic activity of the nullo locus is required to stabilize the actin-myosin network during cellularization in Drosophila 851

SIMPSON, P. and CARTERET, C. Proneural clusters: equivalence groups in the epithelium of Drosophila 927

SIVE, H. L. See HEMMATI-BRIVANLOU, A.

SLACK, J. M. W. See ALBANO, R. M.

SMITH, A. G. See NICHOLS, J.

SMITH, J. C. See ALBANO, R. M.

SMITH, R. C., BEMENT, W. M., DERSCH, M. A., DWORKIN-RASTL, E., DWORKIN, M. B. and CAPCO, D. G. Nonspecific effects of oligodeoxynucleotide injection in Xenopus oocytes: a reevaluation of previous D7 mRNA ablation experiments 769

SNOW, M. H. L. See GINSBURG, M.

STERN, C. D., IRELAND, G. W., HERRICK, S. E., GHERARDI, E., GRAY, J., PERRYMAN, M. and STOKER, M. Epithelial scatter factor and development of the chick embryonic axis 1271 STOKER, M. See STERN, C. D.

STROBAND, H. W. J. See PULLAR, D.

STRUHL, G. See HOWARD, K. R.

SUEMATSU, N. See TAKEDA, H.

SULLIVAN, W., MINDEN, J. S. and ALBERTS, B. M. daughterlessabo-like, a Drosophila maternal-effect mutation that exhibits abnormal centrosome separation during the late blastoderm divisions 311

SURANI, M. A. See THOMPSON, E. M.

SWANN, K. A cytosolic sperm factor stimulates repetitive calcium increases and mimics fertilization in hamster eggs 1295

SWENARCHUK, L. E., CHAMPANERIA, S. and ANDERSON, M. J. Induction of a specialized muscle basal lamina at chimaeric synapses in culture 51

SYLVESTER, A. W., CANDE, W. Z. and FREELING, M. Division and differentiation during normal and liguleless-1 maize leaf development 985

TAKAGI, N. See SHAO, C.

TAKASHIMA, Y. See TANAKA, H.

TAKEDA, H., SUEMATSU, N. and MIZUNO, T. Transcription of prostatic steroid binding protein (PSBP) gene is induced by epithelial-mesenchymal interaction 273

TAKEICHI, M. See FUJIMORI, T.

TANAKA, H., KINUTANI, M., AGATA, A., TAKASHIMA, Y. and OBATA, K. Pathfinding during spinal tract formation in the chick-quail chimera analysed by species-specific monoclonal antibodies 565

TANEMURA, M. See HONDA, H.

TAVERNE, N. See PULLAR, D.

TE KRONNIE, G. See PULLAR, D.

TEAR, G., AKAM, M. and MARTINEZ-ARIAS, A. Isolation of an abdominal-A gene from the locust Schistocerca gregaria and its expression during early embryogenesis 915

TEN DUKE, P. See GATHERER, D.

TESARIK, J., DRAHORAD, J., TESTART, J. and MENDOZA, C. Acrosin activation follows its surface exposure and precedes membrane fusion in human sperm acrosome reaction 391

TESSIER-LAVIGNE, M. See PLACZEK, M.

TESTART, J. See TESARIK, J.

THEODOSIOU, N. G. See HAHNEL, A. C.

THOENEN, H. See KUCHERER-EHRET, A.

THOMAS, W. A., SCHAEFER, A. W. and TREADWAY, R. M. JR Galactosyl transferase-dependence of neurite outgrowth on substratum-bound laminin 1101

THOMPSON, E. M., FLEMING, K. A., EVANS, D. J., FUNDELE, R., SURANI, M. A. and WRIGHT, N. A. Gastric endocrine cells share a clonal origin with other gut cell lineages 477

TILNEY, L. G., COOKE, T. J., CONNELLY, P. S. and TILNEY, M. S. The distribution of plasmodesmata and its relationship to morphogenesis in fern gametophytes 1209

TILNEY, M. S. See TILNEY, L. G.

TIMPL, R. See KLEIN, G.

TING, S. A. See CHUONG, C.-M.

TOBIAS, M. L. See MARIN, M. L.

TOMLINSON, C. R., KOZLOWSKI, M. T. and KLEIN, W. H. Ectoderm nuclei from sea urchin embryos contain a Spec-DNA binding protein similar to the vertebrate transcription factor USF 259

TORPEY, N. P., HEASMAN, J. and WYLIE, C. C. Identification of vimentin and novel vimentin-related proteins in Xenopus oocytes and early embryos 1185

TRAQUINA, Z. R. See HORTSCH, M.

TREADWAY, R. M. JR See THOMAS, W. A.

TRECHSEL, U. See MACKIE, E. J.

TREVARROW, B. See METCALFE, W. K.

TSUI, L-C. See YU, C-K. C.

TUAN, R. S. and BIGIONI, N. Ca²⁺-activated ATPase of the mouse chorioallantoic placenta: developmental expression, characterization and cytohistochemical localization 505

TURBIDE, C. See HUANG, J. Q.

VAESSEN, M.-J., MEIJERS, J. H. C., BOOTSMA, D. and VAN KESSEL, A. G. The cellular retinoic-acid-binding protein is expressed in tissues associated with retinoic-acid-induced malformations 371

VAN KESSEL, A. G. See VAESSEN, M.-J.

VAN NIMMEN, K. See ALBANO, R. M.

VANDEBERG, J. L. See RENFREE, M. B.

VARANI, J. See SCHUGER, L.

VAUGHAN, A. See VIZE, P. D.

VIELKIND, J. R. See SADAGHIANI, B.

VINCENT, A. See PAYRE, F.

VIZE, P. D., VAUGHAN, A. and KRIEG, P. Expression of the Nmyc proto-oncogene during the early development of Xenopus laevis 885

VOGELS, R., DE GRAAF, W. and DESCHAMPS, J. Expression of the murine homeobox-containing gene Hox-2.3 suggests multiple time-dependent and tissue-specific roles during development 1159

WALRO, J. M. See KUCERA, J.

WALTHER, C. See PLACHOV, D.

WANG, T. L. See HAUXWELL, A. J.

WARRIOR, R. and LEVINE, M. Dose-dependent regulation of pair-rule stripes by gap proteins and the initiation of segment polarity 759

WATSON, M. A. and MILBRANDT, J. Expression of the nerve growth factor-regulated NGFI-A and NGFI-B genes in the developing rat 173

WEBB, S. See KAUFMAN, M. H.

WEEKS, G. See KWONG, L.

WEHRLE, B. and CHIQUET, M. Tenascin is accumulated along developing peripheral nerves and allows neurite outgrowth in vitro 401

WERB, Z. See HAHNEL, A. C. WHITE, K. See MARTIN-MORRIS, L. E. WHITE, R. A. H. See GOULD, A. P. WHITFIELD, W. G. F. See RAFF, J. W. WHITTLE, J. R. S. See PHILLIPS, R. G. WHISCHAUS, F. See SHINGOLD

WIESCHAUS, E. See SIMPSON, L.

WERB, Z. See ADLER, R. R.

WOLPERT, L. See BROWN, N. A. WOODS, C. M. See SANGIORGI, F.

WOOD, W. B. See SCHAUER, I. E.

WRAY, G. A. See HENRY, J. J.

WRIGHT, N. A. See THOMPSON, E. M.

WYLIE, C. C. See TORPEY, N. P.

XIE, Y. See KWONG, L.

YAMADA, T. Regulations in the induction of the organized neural system in amphibian embryos 653

YAMANA, K. See YUGE, M.

YANAI, N. See OHNEDA, O.

YOSHIDA, A. See HONDA, H.

YOST, H. J. Inhibition of proteoglycan synthesis eliminates left-right asymmetry in *Xenopus laevis* cardiac looping 865

YUGE, M., KOBAYAKAWA, Y., FUJISUE, M. and YAMANA, K. A cytoplasmic determinant for dorsal axis formation in an early embryo of *Xenopus laevis* 1051

YU, C-K. C., TSUI, L-C. and BREITMAN, M.L. Homologous and heterologous enhancers modulate spatial expression but not cell-type specificity of the murine γF-crystallin promoter 131

ZAPPAVIGNA, V. See IZPISÙA-BELMONTE, J-C. ZELLER, R. W. See HOUGH-EVANS, B. R. ZHANG, C. H. See DONALDSON, W. L. ZIOMEK, C. A. See HAHNEL, A. C. ZUBER, C. See LACKIE, P. M.

Subject Index

abdominal-A

expression in *Drosophila*: Macias and others 1197 expression in *Drosophila*: tear and others 915

homeotic genes regulate growth factor homologs: REUTER AND OTHERS 1031

interactions between *dpp* and homeotic genes:
PANGANIBAN AND OTHERS 1041

Acrosin

activation and acrosome reaction in human spermatozoa: TESARIK AND OTHERS 391

Acrosome

reaction

and acrosin activation in human spermatozoa: TESARIK AND OTHERS 391

Actin

muscle

localization of mRNAs in *Xenopus*: HEMMATI-BRIVANLOU AND OTHERS 325

zygotic activity of *nullo* in *Drosophila*: SIMPSON AND WIESCHAUS 851

Activin A

is a mesoderm-inducing factor in *Xenopus*: Albano and others 435

add

mutation

allelism of *add* and *extra-toes* in mouse: POHL AND OTHERS 1153

denosine

control of cell differentiation in *Dictyostelium* by cAMP and DIF-1: BERKS AND KAY 977

Adhesion

cell

ectopic expression of N-cadherin in Xenopus: FUJIMORI AND OTHERS 97

polarity patterns in insect epidermis: NUBLER-JUNG AND MARDINI 1071

polysialic acid and N-CAM in rat kidney: LACKIE AND OTHERS 933

zebrafish primary neurons express HNK-1: METCALFE and others 491

Alkaline phosphatase

in mouse embryos: Hahnel and others 555 staining of PMGs in early mouse embryo: GINSBURG AND OTHERS 521

Alzheimers disease

Appl transcript localization in Drosophila: MARTIN-MORRIS AND WHITE 185

Ammonia

control of cell differentiation in *Dictyostelium* by cAMP and DIF-1: BERKS AND KAY 977

Amphibia

embryo

deposition of postsynaptic basal lamina: Swenarchuk and others 51

neural system

induction: YAMADA 653

Amyloid protein precursor-like gene

transcript localization in *Drosophila*: Martin-Morris and White 185

Androgen

sexually dimorphic myogenesis in frogs: BAETGE AND OTHERS 689

Antennapedia

interactions between *dpp* and homeotic genes:
PANGANIBAN AND OTHERS 1041

Anterior-posterior axis

Hox-2.9 expression in mouse embryo: Frohman and others 589

Antibody

abd-A expression in *Drosophila*: MACIAS AND OTHERS 1197

HNK-1

immunoreactive neural crest cells: SADAGHIANI AND VIELKIND 197

Antigen

CEA gene family expression in mouse embryos: HUANG AND OTHERS 573

Major Histocompatibility Complex expression by horse trophoblast: DONALDSON AND OTHERS 63

Anti-laminin

and pattern formation in mouse: SCHUGER AND OTHERS 1091

Anti-Mullerian hormone

masculinization of rat fetal ovary: Charpentier and Magre 839

Assembly

basement membrane; sulfation of heparan sulfate: Brauer and others 805

Asymmetry

development of handedness in chimeric embryos: BROWN AND OTHERS 949

left-right

xyloside eliminates cardiac asymmetry in *Xenopus*:
YOST 865

ATPase

mouse placental Ca²⁺-ATPase: TUAN AND BIGIONI 505

dorsal

formation in Xenopus: YUGE AND OTHERS 1051

dorsoventral in Heliocidaris: HENRY AND OTHERS 875

embryonic

scatter factor and determination: STERN AND OTHERS
1271

formatio

in dorsal cytoplasm in *Xenopus*: YUGE AND OTHERS 1051

xyloside eliminates cardiac asymmetry in *Xenopus*:

Hox-2.9 expression in mouse embryo: Frohman and others 589

Axon

guidance

in response to chemoattractant: Placzek and others 19

Basal lamina

deposition of postsynaptic basal lamina in muscle: SWENARCHUK AND OTHERS 51

Basement

membrane

laminin and pattern formation in mouse: SCHUGER AND OTHERS 1091

laminin isoforms during mouse organogenesis: KLEIN AND OTHERS 823

laminin loss from extracellular matrix and gene expression: kücherer-ehret and others 1285 sulfation of heparan sulfate: brauer and others 805

β bungarotoxin (BTX)

spindle formation in aneural muscles: KUCERA AND WALDRO 483

bicoid

mRNA localization signal: MACDONALD 161

Binding

retinoic acid

and CRABP expression: DENCKER AND OTHERS 343

Biomathematical modelling

stem cells: POTTEN AND LOEFFLER 1001

Biomechanics

of notochord in *Xenopus* embryo: ADAMS AND OTHERS 115

Bithorax complex

abd-A expression in *Drosophila*: MACIAS AND OTHERS 1197

Blastocyst

sheep

metabolism of exogenous proteins: PULLAR AND OTHERS 539

Blastoderm

Drosophila

centrosome separation mutation: SULLIVAN AND OTHERS 311

Bone

CEA gene family expression in mouse embryos: HUANG AND OTHERS 573

Brain

Xenopus

ontogeny of POMC expression: HAYES AND LOH 747

BrdU

opsin expression in developing rods: KNIGHT AND RAYMOND 1115

Brown (b)

mutation

cloned gene complements brown mutation: BENNETT AND OTHERS 471

BTX (See \$\beta\$ bungarotoxin)

Cadherin

N-cadherin

ectopic expression in Xenopus: Fujimori and others 97

Caenorhabditis elegans

early embryonic transcription: SCHAUER AND WOOD 1303

Calcium

homeostasis – mouse placental Ca²⁺-ATPase: TUAN AND BIGIONI 505

increase due to sperm factor in hamster egg: swann 1295

Canine development

shaking pup, a point mutation in PLP: NADON AND OTHERS 529

Carcinoembryonic antigen (CEA)

gene family expression in mouse embryos: HUANG AND OTHERS 573

Carcinogenesis

stem cells: POTTEN AND LOEFFLER 1001

Cardiac abnormality

postimplantation development of tetraploid mouse embryos: KAUFMAN AND WEBB 1121

Cardiac looping

xyloside eliminates asymmetry in Xenopus: yost 865

Cardiac troponin T

in rat skeletal muscle: SAGGIN AND OTHERS 547

Cartilage

CEA gene family expression in mouse embryos: HUANG AND OTHERS 573

Catecholaminergic neuron

in explants of murine gut: BAETGE AND OTHERS 689

Caudalization

induction of amphibian organized neural system:

CEA (See carcinoembryonic antigen)

Cell

adhesion

polarity patterns in insect epidermis: NUBLER-JUNG AND MARDINI 1071

polysialic acid and N-CAM in rat kidney: LACKIE AND OTHERS 933

adhesion molecule

ectopic expression of N-cadherin in Xenopus: FUJIMORI AND OTHERS 97

-cell interaction

ontogeny of POMC expression in *Xenopus*: HAYES AND LOH 747

communication

role of patched in Drosophila imaginal discs: PHILLIPS AND OTHERS 105

differentiation

control in *Dictyostelium* by cAMP and DIF-1: BERKS AND KAY 977

lateral inhibition: HONDA AND OTHERS 1349

division

normal and *liguleless-1* leaf development: Sylvester AND OTHERS 985

stem cells: POTTEN AND LOEFFLER 1001

elongation

polarity patterns in insect epidermis: Nubler-Jung and Mardini 1071

enteroendocrine

gastric – clonal origin: Thompson and others 477 germ

cyclin B transcript localization in *Drosophila*: RAFF AND OTHERS 1249

interaction

cell patterning and segment polarity gene *patched*: HIDALGO AND INGHAM 291

lineage

cellular migration patterns in mouse cerebral cortex:
AUSTIN AND CEPKO 713
gastric endocrine cells: THOMPSON AND OTHERS 477

model system

sulfation of heparan sulfate: BRAUER AND OTHERS 805 patterning

and segment polarity gene patched: HIDALGO AND INGHAM 291

polarity

patterns in insect epidermis: NUBLER-JUNG AND MARDINI 1071

proliferation

retinoic acid and *c-fos* in the otic vesicle: REPRESA AND OTHERS 1081

recognition

and tracheal morphogenesis in *Manduca*: NARDI 681

embryonic stem cell-derived mouse fetus: NAGY AND OTHERS 815

stem

a review: POTTEN AND LOEFFLER 1001 derivation in DIA/LIF: NICHOLS AND OTHERS 1341 mouse embryo colonization: LALLEMAND AND BRULFT 1241

surface

and tracheal morphogenesis in *Manduca*: NARDI 681 role of glycoprotein in *Drosophila* imaginal disc morphogenesis: BIRR AND OTHERS 239

Cellularization

zygotic activity of nullo in Drosophila: SIMPSON AND WIESCHAUS 851

Cellular retinoic-acid-binding protein (CRABP)

and RA-induced malformations: vaessen and others 371

and RARs in mouse embryo: DOLLE AND OTHERS 1133
expression and retinoic acid-binding sites: DENCKER AND
OTHERS 343

Cellular retinoid binding protein (CRBP) and RARs: DOLLE AND OTHERS 1133

Cement

gland

localization of mRNAs in *Xenopus*: HEMMATI-BRIVANLOU AND OTHERS 325

Centrosome

separation mutation in *Drosophila*: SULLIVAN AND

Cerebral cortex

mouse

cellular migration patterns: AUSTIN AND CEPKO 713

Chemotropism

guidance of axons: PLACZEK AND OTHERS 19

Chick

embryo

dorsal-ventral regionalization in early mesoderm: CHARLESBOIS AND OTHERS 417

galactosyl transferase-dependent neurite outgrowth: THOMAS AND OTHERS 1101

scatter factor and axis determination: STERN AND OTHERS 1271

tenascin and peripheral nerve growth: Wehrle and Chiquet 401

limb bud

RA-induced malformations and CRABP: VAESSEN AND OTHERS $\ \ 371$

-quail chimera

plasticity of target recognition in retinotectal projection: ICHIJO AND OTHERS 331

spinal tract formation: TANAKA AND OTHERS 565

Chimera

chick-quail

spinal tract formation: Tanaka and others 565 embryonic stem cell-derived mouse fetus: NAGY AND OTHERS 815

gastric endocrine origin: THOMPSON AND OTHERS 477 mouse

craniorachischisis in Loop-tail mutants: MUSCI AND MULLEN 229

development of handedness in chimeric embryos:

BROWN AND OTHERS 949

mouse embryo colonization by embryonic stem cells: LALLEMAND AND BRULET 1241

quail-chick

plasticity of target recognition in retinotectal projection: ICHIJO AND OTHERS 331

synapses

deposition of postsynaptic basal lamina: swenarchuk and others 51

Chorioallantoic placenta

mouse placental Ca²⁺-ATPase: TUAN AND BIGIONI 505

Chromosome

2

Pax8 expression in murine embryogenesis: Plachov and others 643

polyten

sry β and sry δ expression and binding to chromosomes in *Drosophila*: PAYRE AND OTHERS 141

c-kit

gonadal expression encoded at mouse W locus: Manova and others 1057

Cleavage

pattern in Gastrotheca: DEL PINO AND LOOR-VELA 781

Clonal origin

gastric endocrine cells: THOMPSON AND OTHERS 477

Closure

wound

in rat skin: 671

c-mvc

expression of N-myc in Xenopus: VIZE AND OTHERS 885

Collagen

as substratum for organ culture of fetal intestine: ALTMANN AND QUARONI 353

Commissural axon

guidance in response to chemoattractant: PLACZEK AND OTHERS 19

Communication

cell

role of patched in Drosophila imaginal discs: PHILLIPS AND OTHERS 105

Computer simulation

lateral inhibition of differentiation: HONDA AND OTHERS 1349

Cone

growth

axon guidance in response to chemoattractant: PLACZEK AND OTHERS 19

Confocal scanning laser microscopy

microtubule interphase array in plant cells: Flanders and others 897

Cortex

cerebral

cellular migration patterns: AUSTIN AND CEPKO 713

CRABP (See cellular retinoic-acid-binding protein)

Craniofacial abnormality

postimplantation development of tetraploid mouse embryos: Kaufman and Webb 1121

Craniorachischisis

Loop-tail mutants in nouse chimeras: MUSCI AND MULLEN 229

CRBP (See cellular retinoid binding protein) γF-Crystallin

developmental regulation in transgenic mice: YU AND

OTHERS 131 Culture

mouse cells; cloned gene complements brown mutation:
BENNETT AND OTHERS 471

organ

masculinization of rat fetal ovary: CHARPENTIER AND

of fetal intestines on collagen substratum: ALTMANN AND QUARONI 353

wound healing pattern of rat skin: 671

organotypic

laminin and pattern formation in mouse: SCHUGER AND OTHERS 1091

Cutaneous epithelium

NGF mRNA in developing cutaneous epithelium: HARPER AND DAVIES 515

Cyclic AMP

control of cell differentiation in *Dictyostelium*: BERKS AND KAY 977

Cyclin B

transcript localization in *Drosophila*: RAFF AND OTHERS 1249

CyIIIa actin gene

competition for sea urchin regulatory factors in vivo: FRANKS AND OTHERS 31

negative spatial regulation in sea urchin embryo: houghevans and others 41

Cytochrome c

translational regulation of mouse genes during spermatogenesis: HAKE AND OTHERS 249

Cytohistochemical localization

mouse placental Ca²⁺-ATPase: TUAN AND BIGIONI 505

Cytokeratin

gene expression

dorsal-ventral mesoderm regionalization in chick embryo: CHARLESBOIS AND OTHERS 417

Cytoplasmic determinant

dorsal axis formation in Xenopus: YUGE AND OTHERS 1051

D7

nonspecific effects of oligo injection: SMITH AND OTHERS 769

daughterless-abo-like

mutation in Drosophila: SULLIVAN AND OTHERS 311

decapentaplegic

homeotic genes regulate growth factor homologs: REUTER AND OTHERS 1031

interaction with homeotic genes: PANGANIBAN AND OTHERS 1041

Delta

pattern of transcription in Drosophila: Haenlin and others 905

Denervation

muscle

cardiac troponin T: SAGGIN AND OTHERS 547

Determinant

cytoplasmic

dorsal axis formation in *Xenopus*: YUGE AND OTHERS 1051

DIA (See differentiation inhibiting activity)

Dictyostelium discoideum

control of cell differentiation by cAMP and DIF-1: BERKS AND KAY 977

stalk cell formation: KWONG AND OTHERS 303

Didelphis virginiana

mammary anlagen in males: RENFREE AND OTHERS 385

Diencephalon

ontogeny of POMC expression in *Xenopus*: HAYES AND LOH 747

DIF-1

control of cell differentiation in *Dictyostelium*: BERKS AND KAY 977

Differentiation

mesoderm-specific homeobox gene: BODMER AND OTHERS 661

of fetal intestine organ culture on collagen substratum:
ALTMANN AND QUARONI 353
Stem cells: POTTEN AND LOEFFLER 1001

Differentiation inducing factor

stalk cell formation in *Dictyostelium*: KWONG AND OTHERS 303

Differentiation inhibiting activity

embryonic stem cell derivation: NICHOLS AND OTHERS 1341

DIF (See differentiation inducing factor)

Direct

development

dorsoventral axis formation in *Heliocidaris*: HENRY AND

Dirichlet

lateral inhibition of differentiation: HONDA AND OTHERS 1349

Division

cell

normal and *liguleless-1* leaf development: sylvester AND OTHERS 985

stem cells: POTTEN AND LOEFFLER 1001

DNA

binding

sry $\tilde{\beta}$ and sry δ expression and binding to chromosomes in *Drosophila*: PAYRE AND OTHERS 141

dorsal

group of genes

cell shape changes in *Drosophila* gastrulation: LEPTIN AND GRUNEWALD 73

Dorsalization

induction of amphibian organized neural system: YAMADA 653

Dorsoventral axis

in Heliocidaris: HENRY AND OTHERS 875

Dose-dependent regulation

of pair-rule gene expression by gap proteins: WARRIOR AND LEVINE 759

Drosophila

bicoid

mRNA localization signal: MACDONALD 161 dsrc29A expression: KATZEN AND OTHERS 1169 embryo

cell patterning and segment polarity gene patched: HIDALGO AND INGHAM 291

centrosome separation mutation: SULLIVAN AND OTHERS 311

cyclin B transcript localization: RAFF AND OTHERS 1249 muscle development: BATE 791

pattern of transcription of Delta: Haenlin and others 905

terminal pattern formation: CASANOVA 621

zygotic activity of *nullo*: SIMPSON AND WIESCHAUS 851 functional equivalence of proneural clusters: SIMPSON AND CARTERET 927

gastrulation

cell shape changes: LEPTIN AND GRUNEWALD 73

abd-A expression: MACIAS AND OTHERS 1197

hairy stripe regulation: Howard and Struhl 1223 homeotic genes regulate growth factor homologs: REUTER AND OTHERS 1031

imaginal disc

role of surface glycoprotein in morphogenesis: вігк AND отнегs 239

role of *patched*: PHILLIPS AND OTHERS 105 life cycle

dsrc29A expression: Katzen and others 1169 mesoderm-specific homeobox gene: Bodmer and others 661

nervous system

Appl transcript localization in Drosophila: MARTIN-MORRIS AND WHITE 185

neurodevelopment

neurotactin is homologous to serine esters: HORTSCH AND OTHERS 1327

regulation of pair-rule gene expression by gap proteins: WARRIOR AND LEVINE 759

sry β and sry δ expression and binding to chromosomes: Payre and others 141

dsrc29A

expression in Drosophila: KATZEN AND OTHERS 1169

Dysdercus intermedius

polarity patterns in insect epidermis: NUBLER-JUNG AND MARDINI 1071

Dysmyelination

shaking pup, a point mutation in PLP: NADON AND OTHERS 529

Ecdysone

role of surface glycoprotein in *Drosophila* imaginal disc morphogenesis: BIRR AND OTHERS 239

Ectoderm

sea urchin

a USF-like protein: TOMLINSON AND OTHERS 259

Electrofusion

postimplantation development of tetraploid mouse embryos: KAUFMAN AND WEBB 1121

Electron microscopy

gastric endocrine origin: THOMPSON AND OTHERS 477

Elongation

cell

polarity patterns in insect epidermis: NUBLER-JUNG AND MARDINI 1071

mechanics of notochord in *Xenopus* embryo: ADAMS AND OTHERS 115

Embryonal carcinoma

differentiation induces metalloproteinases: ADLER AND OTHERS 211

Embryonic axis

scatter factor and determination: STERN AND OTHERS 1271

Embryonic ectoderm

a USF-like protein in sea urchins: TOMLINSON AND OTHERS 259

Embryonic stem cell

derivation in DIA/LIF: NICHOLS AND OTHERS 1341
-derived mouse fetus: NAGY AND OTHERS 815
mouse embryo colonization: LALLEMAND AND BRULET
1241

Endochondral bone

formation

somatostatin receptors in osteogenesis: MACKIE AND OTHERS 1233

Endoderm

embryonal carcinoma

differentiation induces metalloproteinases: ADLER AND OTHERS 211

interactions between *dpp* and homeotic genes:
PANGANIBAN AND OTHERS 1041

Enteric nervous system

transient catecholaminergic cells: BAETGE AND OTHERS 689

Enteroendocrine cell

gastric-clonal origin: THOMPSON AND OTHERS 477

Epidermal growth factor

receptors on pig trophoderm: corps and others 221

Epidermis

nsect

polarity patterns: NUBLER-JUNG AND MARDINI 1071

Epithelial-mesenchymal interaction

prostate-specific mRNA induction: TAKEDA AND OTHERS 273

scatter factor and embryonic axis determination: STERN AND OTHERS 1271

Epithelium

functional equivalence of proneural clusters in Drosophila: SIMPSON AND CARTERET 927

NGF mRNA in developing cutaneous epithelium: HARPER AND DAVIES 515

Equivalence group

of proneural clusters in *Drosophila*: SIMPSON AND CARTERET 927

Erythrocyte

primitive

vimentin expression in mouse erythropoiesis: SANGIORGI

Erythropoiesis

mouse

vimentin expression: Sangiorgi and others 85 mouse fetal liver erythropoietic microenvironment: Ohneda and others 379

Erythropoietin

mouse fetal liver erythropoietic microenvironment: OHNEDA AND OTHERS 379

eve

regulation of pair-rule gene expression by gap proteins: WARRIOR AND LEVINE 759

Evolution

insect

cell recognition and tracheal morphogenesis in Manduca: NARDI 681

Expression

abd-A in Drosophila: MACIAS AND OTHERS 1197 cytokeratin gene

dorsal-ventral regionalization in chick embryo: CHARLESBOIS AND OTHERS 417

gene

and loss from extracellular matrix: KUCHERER-EHRET AND OTHERS 1285

dsrc29A in Drosophila: Katzen and others 1169
Hox-4.3 in mouse: Izpisua-belmonte and others 733
mesoderm-specific homeobox gene: Bodmer and others 661

NGFI-A and NGFI-B: WATSON AND MILBRANDT 173 ontogeny of POMC expression in *Xenopus*: HAYES AND LOH 747

regulation of pair-rule gene expression by gap proteins: Warrior and Levine 759

TGF- β isoforms in human embryogenesis: Gatherer AND others 445

gonada

of c-kit encoded at mouse W locus: Manova and others 1057

OTHERS 1057 Hox-2.9

in mouse embryo: frohman and others 589 IGF-II in mouse embryogenesis: lee and others 151 mouse placental Ca²⁺-ATPase: tuan and bigioni 505

NGF mRNA in developing cutaneous epithelium: HARPER AND DAVIES 515

of CEA gene family members in mouse embryos: HUANG AND OTHERS 573

of $sry \beta$ and $sry \delta$ and binding to chromosomes in Drosophila: PAYRE AND OTHERS 141

in developing rods: KNIGHT AND RAYMOND 1115 phenotypic

transient catecholaminergic cells: BAETGE AND OTHERS 689

storage protein gene

and mitotic activity: HAUXWELL AND OTHERS 283

TGFb3 RNA during murine embryogenesis: PELTON AND OTHERS 609

yF-crystallin in transgenic mice: YU AND OTHERS 131

Extracellular matrix

differentiation induces metalloproteinases: ADLER AND OTHERS 211

extra-toes

mutation

allelism of add and extra-toes in mouse: POHL AND OTHERS 1153

Factor

growth

homeotic genes regulate homologs in Drosophila: REUTER AND OTHERS 1031

scatter and embryonic axis determination: STERN AND OTHERS 1271

homeoprotein gradient in buds: CHUONG AND OTHERS 1021

plasmodesmata and morphogenesis: TILNEY AND OTHERS 1209

Fertilization

sperm factor stimulates calcium increase in hamster egg: **SWANN** 1295

Fiber

density

mechanics of notochord in Xenopus embryo: ADAMS AND OTHERS 115

Fibrin

wound healing pattern of rat skin: 671

Fish

embryo

HNK-1-immunoreactive neural crest cells: SADAGHIANI AND VIELKIND 197

Flexural stiffness

mechanics of notochord in Xenopus embryo: ADAMS AND OTHERS 115

Floor plate

axon guidance in response to chemoattractant: PLACZEK AND OTHERS 19

Formation

pattern

polarity patterns in insect epidermis: NUBLER-JUNG AND mardini 1071

Frog

development

cleavage pattern in Gastrotheca: DEL PINO AND LOOR-**VELA** 781

Fusion

acrosome reaction and acrosin activation in human spermatozoa: TESARIK AND OTHERS 391

B-galactosidase marker

mouse embryo colonization by embryonic stem cells: LALLEMAND AND BRULET 1241

Galactosyl transferase

-dependent neurite outgrowth on laminin: THOMAS AND OTHERS 1101

Gametophyte

plasmodesmata and fern morphogenesis: TILNEY AND OTHERS 1209

Gap

genes

terminal pattern formation in Drosophila: CASANOVA

protein

regulation of pair-rule gene expression: WARRIOR AND

gastric endocrine origin: THOMPSON AND OTHERS 477

Gastrotheca

cleavage pattern: DEL PINO AND LOOR-VELA 781

Gastrulation

Drosophila

cell shape changes: LEPTIN AND GRUNEWALD 73

Gene

expression

and laminin loss from extracellular matrix: KUCHERER-EHRET AND OTHERS 1285

cytokeratin; dorsal-ventral regionalization in chick embryo: Charlesbois and others 417

dsrc29A in Drosophila: KATZEN AND OTHERS 1169 Hox-4.3 in mouse: IZPISUA-BELMONTE AND OTHERS 733 IGF-II in mouse embryogenesis: LEE AND OTHERS 151 mesoderm-specific homeobox gene: BODMER AND OTHERS 661

NGFI-A and NGFI-B: WATSON AND MILBRANDT 173 ontogeny of POMC expression in Xenopus: HAYES AND LOH 747

regulation of pair-rule gene expression by gap proteins: WARRIOR AND LEVINE 759

storage protein and mitotic activity: HAUXWELL AND OTHERS 283

TGF- β isoforms in human embryogenesis: GATHERER AND OTHERS 445

hairy stripe regulation in Drosophila: HOWARD AND STRUHL 1223

homeobox

expression of hox-2.3: vogels and others 1159 homeotic

function in Drosophila embryogenesis: GOULD AND OTHERS 1319

regulation

homeotic function in Drosophila embryogenesis: GOULD AND OTHERS 1319

Generic physical mechanism

of morphogenesis and pattern formation: NEWMAN AND COMPER 1

Genetic mechanism

of morphogenesis: NEWMAN AND COMPER 1

Genetics

cloned gene complements brown mutation: BENNETT AND OTHERS 471

Genome

imprinting

an extra maternally derived X chromosome and mouse development: SHAO AND TAKAGI 969

Germ

alkaline phosphatase genes in mouse embryos: HAHNEL AND OTHERS 555

cyclin B transcript localization in Drosophila: RAFF AND OTHERS 1249

primordial, in early mouse embryo: GINSBURG AND OTHERS 521

Gland

cement

localization of mRNAs in Xenopus: HEMMATI-BRIVANLOU AND OTHERS 325

Glia

shaking pup, a point mutation in PLP: NADON AND OTHERS 529

Globin

localization of mRNAs in Xenopus: HEMMATI-BRIVANLOU AND OTHERS 325

Glycoprotein

laminin isoforms during mouse organogenesis: KLEIN AND

neurotactin is homologous to serine esters: HORTSCH AND OTHERS 1327

role in Drosophila imaginal disc morphogenesis: BIRR AND OTHERS 239

Goldfish

opsin expression in developing rods: KNIGHT AND RAYMOND 1115

Golgi

zebrafish primary neurons express HNK-1: METCALFE AND OTHERS 491

Gonadal expression

of c-kit encoded at mouse W locus: MANOVA AND OTHERS

Growth

cone

axon guidance in response to chemoattractant: PLACZEK AND OTHERS 19

factor

homeotic genes regulate homologs in Drosophila: REUTER AND OTHERS 1031

NGFI-A and NGFI-B gene expression: WATSON AND MILBRANDT 173

receptors on pig trophoderm: corps and others 221

Guidance

axon

in response to chemoattractant: PLACZEK AND OTHERS 19

cell

zebrafish primary neurons express HNK-1: METCALFE AND OTHERS 491

galactosyl transferase-dependent neurite outgrowth: THOMAS AND OTHERS 1101

Gut

transient catecholaminergic cells: BAETGE AND OTHERS 689

hairy

regulation of pair-rule gene expression by gap proteins: WARRIOR AND LEVINE 759

Hamster

oocyte

sperm factor stimulates calcium increase: swann 1295

Handedness

development in chimeric embryos: BROWN AND OTHERS 949

Hatching gland

localization of mRNAs in Xenopus: HEMMATI-BRIVANLOU AND OTHERS 325

Healing

wound

in rat skin: 671

Heart

mesoderm-specific homeobox gene: BODMER AND OTHERS

Heat

shock transcription factor in Xenopus: OVSENEK AND HEIKKILA

Heavy chains

myosin - spindle formation in aneural muscles: KUCERA AND WALDRO 483

Heliocidaris erythrogramma

dorsoventral axis formation: HENRY AND OTHERS 875

Hematopoietic microenvironment

created by mouse fetal liver stromal cells: OHNEDA AND OTHERS 379

Heparan sulfate proteoglycan

deposition of postsynaptic basal lamina: SWENARCHUK AND OTHERS 51

Histochemistry

ontogeny of POMC expression in Xenopus: HAYES AND LOH 747

HNK-1

antibody immunoreactive neural crest cells: SADAGHIANI AND VIELKIND 197

expression in zebrafish primary neurons: METCALFE AND OTHERS 491

Homeobox

gene

expression of Hox-2.3: vogels and others 1159 Hox-4.3 expression in mouse: IZPISUA-BELMONTE AND OTHERS 733

structure and expression of Hox-3.2 gene: ERSELIUS AND OTHERS 629

Homeodomain

mesoderm-specific homeobox gene: BODMER AND OTHERS 661

Homeoprotein

gradient in feather buds: CHUONG AND OTHERS 1021

Homeostasis

mouse placental Ca²⁺-ATPase: TUAN AND BIGIONI 505

Homeotic gene

abdominal-A expression in Schistocerca: TEAR AND OTHERS 915

function in Drosophila embryogenesis: GOULD AND OTHERS 1319

Hormone-sensitive stage

sexually dimorphic myogenesis in frogs: BAETGE AND OTHERS 689

Horse

trophoblast

Major Histocompatibility Complex expression: DONALDSON AND OTHERS 63

Hox-2.3

expression in mouse embryo: vogels and others 1159

Hox-2.9

expression in mouse embryo: FROHMAN AND OTHERS 589

Hox-3

structure and expression of Hox-3.2 gene: ERSELIUS AND OTHERS 629

expression in mouse: IZPISUA-BELMONTE AND OTHERS 733

HSF (See heat-shock transcription factor) HSPG (See heparan sulfate proteoglycan)

Human

embryo

TGF-β isoforms: GATHERER AND OTHERS 445

spermatozoa

acrosome reaction and acrosin activation: TESARIK AND OTHERS 391

Hybridization

in situ

abdominal-A expression in Schistocerca: TEAR AND OTHERS 915

Appl transcript localization in Drosophila: MARTIN-MORRIS AND WHITE 185

expression of Hox-2.3: VOGELS AND OTHERS 1159 gastric endocrine origin: THOMPSON AND OTHERS 477 localization of mRNAs in Xenopus: HEMMATI-BRIVANLOU AND OTHERS 325

ontogeny of POMC expression in Xenopus: HAYES AND LOH 747

storage protein gene expression and mitotic activity: HAUXWELL AND OTHERS 283

structure and expression of Hox-3.2 gene: ERSELIUS AND OTHERS 629

TGF- β isoforms in human embryogenesis: GATHERER AND OTHERS 445

TGF β 3 RNA expression during murine embryogenesis: PELTON AND OTHERS 609

Hypophysis

ontogeny of POMC expression in Xenopus: HAYES AND LOH 747

IGF-II (See insulin-like growth factor II)

Imaginal disc

Drosophila role of patched: PHILLIPS AND OTHERS 105

role of surface glycoprotein in morphogenesis: BIRR AND OTHERS 239

Immunocytochemistry

gastric endocrine origin: THOMPSON AND OTHERS 477 opsin expression in developing rods: KNIGHT AND RAYMOND 1115

Immunoelectron microscopy

B23 and nucleolin in mouse early embryos: BIGGIOGERA AND OTHERS 1263

Immunolabel

cell recognition and tracheal morphogenesis in Manduca: NARDI 681

Inactivation

X chromosome

and mouse development: SHAO AND TAKAGI 969

Induction

amphibia

of organized neural system: YAMADA 653

deposition of postsynaptic basal lamina: SWENARCHUK AND OTHERS 51

polysialic acid and N-CAM in rat kidney: LACKIE AND OTHERS 933

mesoderm

activin A is a mesoderm-inducing factor: ALBANO AND OTHERS 435

scatter factor and embryonic axis determination: STERN AND OTHERS 1271

Inhibition

lateral

of differentiation: HONDA AND OTHERS 1349

Inner cell mass

embryonic stem cell-derived mouse fetus: NAGY AND OTHERS 815

insulin stimulates mouse pre-embryo growth: HARVEY AND **KAYE** 963

Innervation

NGF mRNA in developing cutaneous epithelium: HARPER AND DAVIES 515

Insect

epidermis

polarity patterns: NUBLER-JUNG AND MARDINI 1071 evolution

cell recognition and tracheal morphogenesis in Manduca: NARDI 681

neurogenesis

lateral inhibition of differentiation: HONDA AND OTHERS 1349

trachae

cell recognition and tracheal morphogenesis in Manduca: NARDI 681

Insertional mutagenesis

allelism of add and extra-toes in mouse: POHL AND OTHERS 1153

In situ

hybridization

abdominal-A expression in Schistocerca: TEAR AND OTHERS 915

Appl transcript localization in Drosophila: MARTIN-MORRIS AND WHITE 185

expression of Hox-2.3 in mouse: vogels and others

gastric endocrine origin: THOMPSON AND OTHERS 477 localization of mRNAs in Xenopus: HEMMATI-BRIVANLOU AND OTHERS 325

ontogeny of POMC expression in Xenopus: HAYES AND LOH 747

prostate-specific mRNA induction: TAKEDA AND OTHERS 273

storage protein gene expression and mitotic activity: HAUXWELL AND OTHERS 283

structure and expression of Hox-3.2 gene: ERSELIUS AND OTHERS 629

TGF- β isoforms in human embryogenesis: GATHERER AND OTHERS 445

TGF β 3 RNA expression during murine embryogenesis: PELTON AND OTHERS 609

Insulin

stimulates mouse pre-embryo growth: HARVEY AND KAYE

Insulin-like growth factor

receptors on pig trophoderm: corps and others 221

Insulin-like growth factor II

expression in mouse embryogenesis: LEE AND OTHERS 151

Interaction

cell-cell

ontogeny of POMC expression in Xenopus: HAYES AND LOH 747

epithelial-mesenchymal

prostate-specific mRNA induction: TAKEDA AND OTHERS 273

scatter factor and embryonic axis determination: STERN AND OTHERS 1271

Intermediate filament

vimentin expression in mouse erythropoiesis: SANGIORGI
AND OTHERS 85

vimentins in Xenopus: TORPEY AND OTHERS 1185

Interphase

microtubule array in plant cells: FLANDERS AND OTHERS 897

Intestinal crypt

stem cells: POTTEN AND LOEFFLER 1001

Intestine

organ culture on collagen substratum: ALTMANN AND QUARONI 353

Intrafusal muscle fibre

spindle formation in aneural muscles: KUCERA AND WALDRO 483

In vitro

axon guidance in response to chemoattractant: PLACZEK AND OTHERS 19

In vivo

competition for sea urchin regulatory factors: FRANKS AND OTHERS 31

Isoform

laminin, during mouse organogenesis: KLEIN AND OTHERS 823

Isozyme

alkaline phosphatase genes in mouse embryos: HAHNEL AND OTHERS 555

jimpy

compared to shaking pup, a point mutation in PLP: NADON AND OTHERS 529

Kidney

Pax8 expression in murine embryogenesis: PLACHOV AND OTHERS 643

Kruppel

regulation of pair-rule gene expression by gap proteins: WARRIOR AND LEVINE 759

labial

homeotic genes regulate growth factor homologs: REUTER AND OTHERS 1031

interactions between *dpp* and homeotic genes:
PANGANIBAN AND OTHERS 1041

lacZ

developmental regulation of γ F-crystallin promoter: YU AND OTHERS 131

mouse embryo colonization by embryonic stem cells: LALLEMAND AND BRULET 1241

Laminin

and pattern formation in mouse lung: SCHUGER AND OTHERS 1091

galactosyl transferase-dependent neurite outgrowth:
THOMAS AND OTHERS 1101

isoforms during mouse organogenesis: KLEIN AND OTHERS 823

loss from extracellular matrix and gene expression: KUCHERER-EHRET AND OTHERS 1285

Laryngeal muscle

sexually dimorphic myogenesis in frogs: BAETGE AND OTHERS 689

Lateral inhibition

of differentiation: HONDA AND OTHERS 1349

Leaf

development

of normal and liguleless-1: SYLVESTER AND OTHERS 985

Lectin

-gold staining

gastric endocrine origin: THOMPSON AND OTHERS 477

Left-right

asymmetry

xyloside eliminates cardiac asymmetry in *Xenopus*: yost 865

Lens

mouse

developmental regulation of γF-crystallin promoter: YU
AND OTHERS 131

Leukemia inhibiting factor

embryonic stem cell derivation: NICHOLS AND OTHERS 1341

LIF (See Leukemia inhibitory factor)

Liguleless-1

and normal leaf development in maize: SYLVESTER AND OTHERS 985

Limb

development

mouse Hox-4.3 gene expression: IZPISUA-BELMONTE AND OTHERS 733

Limb bud

chick

RA-induced malformations and CRABP: VAESSEN AND OTHERS 371

Lineage

specific

negative spatial regulation of CyIIIa actin gene: HOUGH-EVANS AND OTHERS 41

Liver

mouse fetal

erythropoietic microenvironment: OHNEDA AND OTHERS 379

Looping

cardiac

xyloside eliminates asymmetry in Xenopus: YOST 865

Loop-tail mutant

mouse chimera – craniorachischisis: MUSCI AND MULLEN 229

Lung

organotypic pattern formation in mouse: SCHUGER AND OTHERS 1091

Maize

normal and *liguleless-1* leaf development: SYLVESTER AND OTHERS 985

Major Histocompatibility Complex

expression by horse trophoblast: DONALDSON AND OTHERS 63

Mammary gland

anlagen in male didelphids: RENFREE AND OTHERS 385

Marsupial

neonates

mammary anlagen in male didelphids: RENFREE AND OTHERS 385

Marsupial frog

cleavage pattern in *Gastrotheca*: DEL PINO AND LOOR-VELA 781

Maternal-effect

centrosome separation mutation in *Drosophila*: SULLIVAN AND OTHERS 311

Maternally derived X chromosome

and mouse development: SHAO AND TAKAGI 969

Maternal mRNA

nonspecific effects of oligo injection: SMITH AND OTHERS 769

Matrigel

laminin and pattern formation in mouse: SCHUGER AND OTHERS 1091

Maturation

oocyte

nonspecific effects of oligo injection: SMITH AND

Mauthner cell

zebrafish primary neurons express HNK-1: METCALFE AND OTHERS 491

Mechanism

of morphogenesis and pattern formation: NEWMAN AND COMPER

Melanocyte

mouse

cloned gene complements brown mutation: BENNETT AND OTHERS 471

Membrane

basement

laminin loss from extracellular matrix and gene expression: KUCHERER-EHRET AND OTHERS 1285 sulfation of heparan sulfate: BRAUER AND OTHERS 805

acrosome reaction and acrosin activation in human spermatozoa: TESARIK AND OTHERS 391

laminin and pattern formation in mouse: SCHUGER AND 1091 OTHERS

potential

sperm factor stimulates calcium increase in hamster egg: **SWANN** 1295

transport

mouse placental Ca²⁺-ATPase: TUAN AND BIGIONI 505 Meninges

CEA gene family expression in mouse embryos: HUANG AND OTHERS 573

Mesoderm

Hox-2.9 expression in mouse embryo: FROHMAN AND OTHERS

induction

activin A is a mesoderm-inducing factor in Xenopus: ALBANO AND OTHERS 435

xyloside eliminates cardiac asymmetry in Xenopus: **YOST** 865

regionalization

dorsal-ventral in chick embryo: CHARLESBOIS AND OTHERS 417

scatter factor and embryonic axis determination: STERN AND OTHERS 1271

-specific homeobox gene: BODMER AND OTHERS 661 visceral

homeotic genes regulate growth factor homologs: REUTER AND OTHERS 1031

interactions between dpp and homeotic genes: PANGANIBAN AND OTHERS 1041

Mesonephros

polysialic acid and N-CAM in rat kidney: LACKIE AND OTHERS 933

Messenger

RNA

cyclin B transcript localization in Drosophila: RAFF AND OTHERS 1249

laminin isoforms during mouse organogenesis: KLEIN AND OTHERS 823

laminin loss from extracellular matrix and gene expression: KUCHERER-EHRET AND OTHERS 1285 regulation of ornithine decarboxylase in Xenopus: BASSEZ AND OTHERS 955

Metalloproteinases

induction in embryonal carcinomas: ADLER AND OTHERS

Metanephros

polysialic acid and N-CAM in rat kidney: LACKIE AND OTHERS 933

MHC (See Major Histocompatibility Complex) Microtubule

cyclin B transcript localization in Drosophila: RAFF AND OTHERS 1249

interphase array in plant cells: FLANDERS AND OTHERS 897

Midblastula

transition

cleavage pattern in Gastrotheca: DEL PINO AND LOOR-**VELA** 781

Xenopus embryonic HSF activation: OVSENEK AND HEIKKILA 427

MIF (See mesoderm-inducing factors)

Migration

mesoderm

xyloside eliminates cardiac asymmetry in Xenopus:

pathways

HNK-1-immunoreactive neural crest cells: SADAGHIANI AND VIELKIND 197 patterns in mouse cerebral cortex: AUSTIN AND CEPKO 713

insulin stimulates mouse pre-embryo growth: HARVEY AND **KAYE** 963

Mitosis

pea embryo

storage protein gene expression and mitotic activity: HAUXWELL AND OTHERS 283

Monoclonal antibody

spinal tract formation in chick-quail chimeras: TANAKA AND OTHERS 565

Monodelphis domestica

mammary anlagen in male didelphids: RENFREE AND OTHERS 385

Morphogen

activin A is a mesoderm-inducing factor in Xenopus: ALBANO AND OTHERS 435

Morphogenesis

cell shape changes during Drosophila gastrulation: LEPTIN AND GRUNEWALD 73

ectopic expression of N-cadherin in Xenopus: FUJIMORI AND OTHERS 97

sexual

mammary anlagen in male didelphids: RENFREE AND OTHERS 385

Morphogenetic mutation

allelism of add and extra-toes in mouse: POHL AND OTHERS 1153

Motility factors

and chick embryonic axis determination: STERN AND OTHERS 1271

Mouse

chimaeras

gastric endocrine origin: THOMPSON AND OTHERS 477 chimera

craniorachischisis in Loop-tail mutants: MUSCI AND MULLEN 229 development of handedness: BROWN AND OTHERS 949 chromsome 2

Pax8 expression in murine embryogenesis: PLACHOV AND OTHERS 643

development

an extra maternally derived X chromosome: SHAO AND TAKAGI 969

TGF β 3 RNA expression: Pelton and others 609 early embryo

B23 and nucleolin: BIGGIOGERA AND OTHERS 1263 embryo

alkaline phosphatase: HAHNEL AND OTHERS 555

CEA gene family expression: HUANG AND OTHERS 573 cellular migration patterns in cerebral cortex: AUSTIN AND CEPKO 713

colonization by embryonic stem cells: Lallemand and Brulet 1241

embryonic stem cell-derived mouse fetus: NAGY AND OTHERS 815

gonadal expression of c-kit encoded at mouse W locus:
MANOVA AND OTHERS 1057

Hox-2.9 expression: Frohman and others 589 IGF-II gene expression: Lee and others 151

laminin and pattern formation: SCHUGER AND OTHERS 1091
laminin isoforms during organogenesis: KLEIN AND

others 823

NGF mRNA in developing cutaneous epithelium: HARPER AND DAVIES 515

Pax8 expression in kidney and thyroid: Plachov and others 643

postimplantation development of tetraploid: Kaufman and webb 1121

primordial germ cells: GINSBURG AND OTHERS 521
RARs and retinoid binding proteins: DOLLE AND
OTHERS 1133

retinoic acid-binding sites and CRABP expression:

DENCKER AND OTHERS 343

structure and expression of *Hox-3.2* gene: ERSELIUS AND OTHERS 629

erythropoiesis

vimentin expression: SANGIORGI AND OTHERS 85 fetal liver

erythropoietic microenvironment: OHNEDA AND OTHERS 379

gene

Hox-4.3 expression: IZPISUA-BELMONTE AND OTHERS 733

genetics

allelism of add and extra-toes in mouse: POHL AND OTHERS 1153

cloned gene complements brown mutation: Bennett and others 471

homeobox gene

expression of *Hox-2.3*: vogels and others 1159 neonate

laminin loss from extracellular matrix and gene expression: KUCHERER-EHRET AND OTHERS 1285 placenta

mouse placental Ca²⁺-ATPase: TUAN AND BIGIONI 505 pre-embryo

insulin stimulates growth: HARVEY AND KAYE 963 transgenic

developmental regulation of γF-crystallin promoter: YU AND OTHERS 131

msh-2

mesoderm-specific homeobox gene: bodmer and others $661\,$

Muscle

actin

localization of mRNAs in *Xenopus*: HEMMATI-BRIVANLOU AND OTHERS 325

CEA gene family expression in mouse embryos: HUANG AND OTHERS 573

denervation

cardiac troponin T: SAGGIN AND OTHERS 547

deposition of postsynaptic basal lamina: SWENARCHUK AND OTHERS 51

differentiation

spindle formation in aneural muscles: KUCERA AND WALDRO 483

Drosophila

development: BATE 791

intrafusal fibers

spindle formation in aneural muscles: KUCERA AND WALDRO 483

laryngeal

sexually dimorphic myogenesis in frogs: BAETGE AND OTHERS 689

regeneration

cardiac troponin T: SAGGIN AND OTHERS 547

skeletal

cardiac troponin T: SAGGIN AND OTHERS 547

Mutagenesis

insertional

allelism of add and extra-toes in mouse: POHL AND OTHERS 1153

Mutant

Loop-tail

craniorachischisis in mouse chimeras: MUSCI AND MULLEN 229

shaking pup

a point mutation in PLP: NADON AND OTHERS 529

Mutation

daughterless-abo-like

centrosome separation mutation in *Drosophila*: SULLIVAN AND OTHERS 311

morphogenetic

allelism of add and extra-toes in mouse: POHL AND OTHERS 1153

Myelin

shaking pup, a point mutation in PLP: NADON AND OTHERS 529

Myogenesis

mesoderm-specific homeobox gene: BODMER AND OTHERS 661

sexual differentiation of muscle in *Xenopus*: MARIN AND OTHERS 703

Myosin

heavy chains – spindle formation in aneural muscles: KUCERA AND WALDRO 483

zygotic activity of nullo in Drosophila: SIMPSON AND WIESCHAUS 851

N-CAM (See neural cell adhesion molecule)

Negative spatial regulation

of CyIIIa actin gene: HOUGH-EVANS AND OTHERS 41
Neonatal mouse

laminin loss from extracellular matrix and gene expression: kucherer-ehret and others 1285

Veonate

mammary anlagen in male didelphids: RENFREE AND OTHERS 385

Nerve

dependence

spindle formation in aneural muscles: KUCERA AND

growth factor

NGFI-A and NGFI-B gene expression: watson and MILBRANDT 173

peripheral

outgrowth and tenascin: WEHRLE AND CHIQUET 401 sciatic

laminin loss from extracellular matrix and gene expression: KUCHERER-EHRET AND OTHERS 1285

Nervous system

enteric

transient catecholaminergic cells: BAETGE AND OTHERS 689

Neural cell adhesion molecule

and polysialic acid in rat kidney: LACKIE AND OTHERS 933

Neural crest

cell

HNK-1-immunoreactive neural crest cells: SADAGHIANI
AND VIELKIND 197

expression of N-myc in Xenopus: VIZE AND OTHERS 885

Neural development

Appl transcript localization in Drosophila: MARTIN-MORRIS AND WHITE 185

Neural induction

protein kinase C in early *Xenopus* embryogenesis: отте AND OTHERS 461

scatter factor and embryonic axis determination: STERN AND OTHERS 1271

Neural locus

Appl transcript localization in *Drosophila*: MARTIN-MORRIS AND WHITE 185

Neural precursor

functional equivalence of proneural clusters in Drosophila: SIMPSON AND CARTERET 927

Neural system

amphibia

induction: YAMADA 653

Neural tube

defects

craniorachischisis in mouse chimeras: MUSCI AND MULLEN 229

Neurite

galactosyl transferase-dependent outgrowth: THOMAS AND OTHERS 1101

outgrowth

and tenascin: WEHRLE AND CHIQUET 401

Neurodevelopment

Drosophila

neurotactin is homologous to serine esters: HORTSCH AND OTHERS 1327

Neurogenesis

expression of N-myc in Xenopus: VIZE AND OTHERS 885 lateral inhibition of differentiation: HONDA AND OTHERS 1349

ontogeny of POMC expression in Xenopus: HAYES AND

pattern of transcription of *Delta* in *Drosophila*: Haenlin and others 905

Neuromuscular junction

deposition of postsynaptic basal lamina: swenarchuk and others 51

Neuron

functional equivalence of proneural clusters in Drosophila: SIMPSON AND CARTERET 927

zebrafish primary neurons express HNK-1: METCALFE AND OTHERS 491

Neuron-specific enolase

transient catecholaminergic cells: BAETGE AND OTHERS 689

Neuropeptide

ontogeny of POMC expression in *Xenopus*: HAYES AND LOH 747

Neurotactin

is homologous to serine esters in *Drosophila*: HORTSCH AND OTHERS 1327

NGF

mRNA in developing cutaneous epithelium: HARPER AND DAVIES 515

NGFI-A

and NGFI-B gene expression: watson and milbrandt 173

NGFI-B

and NGFI-A gene expression: WATSON AND MILBRANDT

Nidogen

laminin isoforms during mouse organogenesis: KLEIN AND OTHERS 823

N-myc

expression in Xenopus: VIZE AND OTHERS 885

Node

cell recognition and tracheal morphogenesis in $\it Manduca$: NARDI 681

Notochord

mechanics in Xenopus embryo: ADAMS AND OTHERS 115

Nucleolus

B23 and nucleolin in early mouse embryo: BIGGIOGERA AND OTHERS 1263

Nucleotide

incorporation

early embryonic transcription in *Caenorhabditis*: SCHAUER AND WOOD 1303

nullo

zygotic activity in Drosophila: SIMPSON AND WIESCHAUS 851

ODN (See oligodeoxynucleotide)

Oligodendrocyte

shaking pup, a point mutation in PLP: NADON AND OTHERS 529

Oligodeoxyribonucleotide

nonspecific effects of injection into *Xenopus* oocytes: SMITH AND OTHERS 769

Oncogene

dsrc29A expression in Drosophila: KATZEN AND OTHERS 1169

expression of N-myc in Xenopus: VIZE AND OTHERS 885 retinoic acid and c-fos in the otic vesicle: REPRESA AND OTHERS 1081

Onoclea sensibilis

plasmodesmata and morphogenesis: TILNEY AND OTHERS 1209

Oocyte

hamster

sperm factor stimulates calcium increase: SWANN 1295 maturation

nonspecific effects of oligo injection: SMITH AND OTHERS 769

mouse

gonadal expression of c-kit encoded at W locus: MANOVA AND OTHERS 1057

Xenopus

nonspecific effects of oligo injection: SMITH AND

regulation of ornithine decarboxylase: BASSEZ AND OTHERS 955

vimentins: TORPEY AND OTHERS 1185

Opossum

mammary anlagen in male didelphids: RENFREE AND OTHERS 385

Opsin

expression

in developing rods: KNIGHT AND RAYMOND 1115

Organ

culture

masculinization of rat fetal ovary: CHARPENTIER AND

of fetal intestines on collagen substratum: ALTMANN AND OUARONI 353

wound healing pattern of rat skin: 671

Organotypic culture

laminin and pattern formation in mouse: SCHUGER AND OTHERS 1091

Orizvas latipes

HNK-1-immunoreactive neural crest cells: SADAGHIANI AND VIELKIND 197

Ornithine decarboxylase

regulation in Xenopus: BASSEZ AND OTHERS 955

Osmotic activity

mechanics of notochord in Xenopus . nbryo: ADAMS AND OTHERS 115

Osteogenesis

somatostatin receptors: MACKIE AND OTHERS 1233

Otic

development

retinoic acid and c-fos in the otic vesicle: REPRESA AND OTHERS 1081

Outgrowth

peripheral neurites and tenascin: WEHRLE AND CHIQUET 401

Ovary

masculinization: CHARPENTIER AND MAGRE 839

Paired box

Pax8 expression in murine embryogenesis: PLACHOV AND OTHERS 643

Pair-rule expression

regulation by gap proteins: WARRIOR AND LEVINE 759

Pair-rule gene

hairy stripe regulation in Drosophila: HOWARD AND STRUHL 1223

Paralogous gene

structure and expression of Hox-3.2 gene: ERSELIUS AND OTHERS 629

Parasegment

abd-A expression in Drosophila: MACIAS AND OTHERS 1197

patched

cell patterning and segment polarity gene expression: HIDALGO AND INGHAM 291

role in Drosophila imaginal discs: PHILLIPS AND OTHERS

Pathfinding

spinal tract formation in chick-quail chimeras: TANAKA AND OTHERS 565

Pattern

cleavage in Gastrotheca: DEL PINO AND LOOR-VELA 781 formation

homeoprotein gradient in feather buds: CHUONG AND OTHERS 1021

in terminal system of Drosophila: CASANOVA 621 physical mechanisms of morphogenesis: NEWMAN AND

polarity patterns in insect epidermis: NUBLER-JUNG AND MARDINI 1071

RARs and retinoid binding proteins: DOLLE AND OTHERS 1133

regulation of pair-rule gene expression by gap proteins: WARRIOR AND LEVINE 759

role of patched in Drosophila imaginal discs: PHILLIPS AND OTHERS 105

of expression of Hox-4.3: IZPISUA-BELMONTE AND OTHERS

of POMC expression in Xenopus: HAYES AND LOH 747

Pax cDNA

Pax8 expression in murine embryogenesis: PLACHOV AND OTHERS 643

Peripheral nerve

outgrowth and tenascin: WEHRLE AND CHIQUET 401

Phenotypic expression

transient catecholaminergic cells: BAETGE AND OTHERS

Phylogenetic comparison

bicoid mRNA localization signal: MACDONALD 161

Physical mechanism

of morphogenesis and pattern formation: NEWMAN AND COMPER 1

Pig

trophoderm

growth factor receptors: CORPS AND OTHERS 221

Pisum sativum

storage protein gene expression and mitotic activity: HAUXWELL AND OTHERS 283

Pituitary

ontogeny of POMC expression in Xenopus: HAYES AND LOH 747

Plasmodesmata

and fern morphogenesis: TILNEY AND OTHERS 1209

Plasticity

of target recognition in retinotectal projection: ICHIJO AND OTHERS 331

Pluripotency

embryonic stem cell-derived mouse fetus: NAGY AND OTHERS 815

Polar granule

cyclin B transcript localization in Drosophila: RAFF AND OTHERS 1249

Polarity

patterns in insect epidermis: NUBLER-JUNG AND MARDINI 1071

determination

dorsoventral axis formation in Heliocidaris: HENRY AND OTHERS 875

segment

regulation of pair-rule gene expression by gap proteins: WARRIOR AND LEVINE 759

role of patched in Drosophila imaginal discs: PHILLIPS AND OTHERS 105

Polar trophectoderm

an extra maternally derived X chromosome and mouse development: Shao and takagi 969

Polycomb

function in *Drosophila* embryogenesis: GOULD AND OTHERS 1319

Polymerase chain reaction

alkaline phosphatase genes in mouse embryos: HAHNEL AND OTHERS 555

Polytene chromosome

sry β and sry δ expression and binding to chromosomes in Drosophila: PAYRE AND OTHERS 141

POMC

gene expression in Xenopus: HAYES AND LOH 747

Positional information

hairy stripe regulation in *Drosophila*: HOWARD AND STRUHL 1223

Hox-2.9 expression in mouse embryo: Frohman and others 589

Positional signalling

role of *patched* in *Drosophila* imaginal discs: PHILLIPS AND OTHERS 105

Postimplantation

development of tetraploid mouse embryos: KAUFMAN AND WEBB 1121

Post-transcriptional regulation

of ornithine decarboxylase in *Xenopus*: BASSEZ AND OTHERS 955

Potential

membrane

sperm factor stimulates calcium increase in hamster egg: swann 1295

Pre-embryo

mouse

insulin stimulates mouse pre-embryo growth: HARVEY
AND KAYE 963

Preimplantation

mouse embryo

alkaline phosphatases: HAHNEL AND OTHERS 555

Prestalk

cells

stalk cell formation in *Dictyostelium*: KWONG AND OTHERS 303

Primary structure

mouse *Hox-4.3* gene expression: IZPISUA-BELMONTE AND OTHERS 733

Primitive erythrocyte

vimentin expression in mouse erythropoiesis: Sangiorgi and others 85

Primitive streak

scatter factor and embryonic axis determination: STERN AND OTHERS 1271

Primordial germ cell

alkaline phosphatase genes in mouse embryos: HAHNEL AND OTHERS 555

in early mouse embryo: GINSBURG AND OTHERS 521

Proliferation

cell

retinoic acid and *c-fos* in the otic vesicle: REPRESA AND OTHERS 1081

Promoter sequence

Appl transcript localization in Drosophila: MARTIN-MORRIS AND WHITE 185

Proneural cluster

functional equivalence in *Drosophila*: SIMPSON AND CARTERET 927

Proopiomelanocortin

gene expression in Xenopus: HAYES AND LOH 747

Prostate

-specific mRNA induction: TAKEDA AND OTHERS 273

Prostatic steroid binding protein gene

prostate-specific mRNA induction: TAKEDA AND OTHERS 273

Protein

metabolism

in ovine blastocyst: PULLAR AND OTHERS 539 synthesis

nonspecific effects of oligo injection: SMITH AND OTHERS 769

vimentins in Xenopus: TORPEY AND OTHERS 1185 zinc finger

sry β and sry δ expression and binding to chromosomes in *Drosophila*: PAYRE AND OTHERS 141

Proteinase

differentiation induces metalloproteinases in embryonal proteinases: ADLER AND OTHERS 211

Protein kinase C

in early Xenopus embryogenesis: OTTE AND OTHERS 461

Protein-tyrosine kinase

dsrc29A expression in Drosophila: KATZEN AND OTHERS 1169

Proteoglycan

deposition of postsynaptic basal lamina: SWENARCHUK AND OTHERS 51

xyloside eliminates cardiac asymmetry in *Xenopus*: YOST 865

Proteolipid protein gene (PLP)

shaking pup, a point mutation: NADON AND OTHERS 529

Proteolysis

role of surface glycoprotein in *Drosophila* imaginal disc morphogenesis: BIRR AND OTHERS 239

Prothallus

plasmodesmata and fern morphogenesis: TILNEY AND OTHERS 1209

Protonema

plasmodesmata and fern morphogenesis: TILNEY AND OTHERS 1209

Proto-oncogene

dsrc29A expression in Drosophila: KATZEN AND OTHERS 1169

gonadal expression of c-kit encoded at mouse W locus: Manova and others 1057

PSBP (See prostatic steroid binding protein gene)

Quail

-chick chimera

plasticity of target recognition in retinotectal projection: ICHIJO AND OTHERS 331
spinal tract formation: TANAKA AND OTHERS 565

RAR- α , β and γ

and retinoid binding proteins: DOLLE AND OTHERS 1133 RA (See Retinoic acid)

Rat

embryo

axon guidance in response to chemoattractant: PLACZEK AND OTHERS 19

cardiac troponin T in skeletal muscle: SAGGIN AND OTHERS 547

NGFI-A and NGFI-B gene expression: watson and MILBRANDT 173

prostate-specific mRNA induction: TAKEDA AND OTHERS 273

somatostatin receptors in osteogenesis: MACKIE AND OTHERS 1233

fetus

spindle formation in aneural muscles: KUCERA AND WALDRO 483

wound healing pattern of skin: 671

ovary

masculinization: CHARPENTIER AND MAGRE 839

Receptor

growth factor

on pig trophoderm: corps and others 221

mouse pre-embryo growth: HARVEY AND KAYE 963 somatostatin in osteogenesis: MACKIE AND OTHERS 1233

Recognition

cell

and tracheal morphogenesis in Manduca: NARDI 681 target

plasticity in retinotectal projection: ICHUO AND OTHERS

Regeneration

muscle

cardiac troponin T: SAGGIN AND OTHERS 547

Regionalization

mesoderm

dorsal-ventral in chick embryo: CHARLESBOIS AND OTHERS 417

Regulation

abd-A expression in Drosophila: MACIAS AND OTHERS 1197

amphibia

of organized neural system: YAMADA 653

developmental

of γF-crystallin promoter in transgenic mice: YU AND OTHERS 131

dose-dependent

of pair-rule gene expression by gap proteins: WARRIOR AND LEVINE 759

gene in *Drosophila* embryogenesis: GOULD AND OTHERS 1319

post-transcriptional

of ornithine decarboxylase in *Xenopus*: BASSEZ AND OTHERS 955

spatial

cell patterning and segment polarity gene patched: HIDALGO AND INGHAM 291

transcriptional

hairy stripe regulation in *Drosophila*: HOWARD AND STRUHL 1223

Regulatory factor

of sea urchin, competition in vivo: Franks and others 31

Retinoic acid

and *c-fos* in the otic vesicle: REPRESA AND OTHERS 1081
-binding sites and CRABP expression: DENCKER AND
OTHERS 343

-induced malformations and CRABP: vaessen and others 371

receptors

and retinoid binding proteins: DOLLE AND OTHERS 1133

Retinotectal projection

plasticity of target recognition: ICHIJO AND OTHERS 331

Retroviru

cellular migration patterns in mouse cerebral cortex:
AUSTIN AND CEPKO 713

cloned gene complements brown mutation: BENNETT AND OTHERS 471

RNA

early embryonic transcription in Caenorhabditis: SCHAUER AND WOOD 1303

expression

TGFβ3 during murine embryogenesis: PELTON AND OTHERS 609

maternal messenger

nonspecific effects of oligo injection: SMITH AND OTHERS 769

messenger

bicoid localization signal: MACDONALD 161

cyclin B transcript localization in *Drosophila*: RAFF AND OTHERS 1249

laminin isoforms during mouse organogenesis: KLEIN AND OTHERS 823

laminin loss from extracellular matrix and gene expression: KUCHERER-EHRET AND OTHERS 1285

NGF mRNA in developing cutaneous epithelium: HARPER AND DAVIES 515

pattern of transcription of *Delta* in *Drosophila*: Haenlin and others 905

regulation of mouse cytochrome c genes during spermatogenesis: HAKE AND OTHERS 249

regulation of ornithine decarboxylase in *Xenopus*:

BASSEZ AND OTHERS 955

transcription of PSBP gene in rats: TAKEDA AND OTHERS 273

messenger injection

ectopic expression of N-cadherin in Xenopus: FUJIMORI AND OTHERS 97

Rohon-Beard

zebrafish primary neurons express HNK-1: ${\tt METCALFE}$ and others ${\tt 491}$

Run-on transcription

early embryonic transcription in *Caenorhabditis*: SCHAUER AND WOOD 1303

Scanning microscopy

microtubule interphase array in plant cells: Flanders and others 897

Scatter

factor and embryonic axis determination: STERN AND OTHERS 1271

Schistocerca

embryo

abdominal-A expression: TEAR AND OTHERS 915

Sciatic nerve

laminin loss from extracellular matrix and gene expression: KUCHERER-EHRET AND OTHERS 1285

Scrotun

mammary anlagen in male didelphids: RENFREE AND OTHERS 385

Sea urchin

development

dorsoventral axis formation in *Heliocidaris*: HENRY AND OTHERS 875

embryo

a USF-like protein: Tomlinson and others 259 competition for regulatory factors in vivo: Franks and others 31

negative spatial regulation of CyIIIa actin gene: HOUGHEVANS AND OTHERS 41

Secondary axis

dorsal axis formation in Xenopus: YUGE AND OTHERS 1051

Seed

development

storage protein gene expression and mitotic activity: HAUXWELL AND OTHERS 283

Segment

polarity

regulation of pair-rule gene expression by gap proteins: WARRIOR AND LEVINE 759

role of *patched* in *Drosophila* imaginal discs: PHILLIPS AND OTHERS 105

Segmentation

hairy stripe regulation in *Drosophila*: HOWARD AND STRUHL 1223

Segment polarity gene

patched

cell patterning: HIDALGO AND INGHAM 291

Selfmaintenance

stem cells: POTTEN AND LOEFFLER 1001

Sensory bristle

functional equivalence of proneural clusters in Drosophila: SIMPSON AND CARTERET 927

Serendipity gene

 $sry \ eta$ and $sry \ \delta$ expression and binding to chromosomes in Drosophila: Payre and others 141

Serine

esterase domain

neurotactin is homologous to serine esters: HORTSCH AND OTHERS 1327

Sex combs reduced

interactions between *dpp* and homeotic genes:
PANGANIBAN AND OTHERS 1041

Sexual differentiation

mammary anlagen in male didelphids: RENFREE AND OTHERS 385

shaeev

functional equivalence of proneural clusters in Drosophila: SIMPSON AND CARTERET 927

shaking pup

mutant

a point mutation in PLP: NADON AND OTHERS 529

Sheep

blastocyst

exogenous protein metabolism: PULLAR AND OTHERS 539

Short-germ

embryo

abdominal-A expression in Schistocerca: TEAR AND OTHERS 915

Signal

transduction

protein kinase C in early *Xenopus* embryogenesis: otte AND others 461

Silver staining

B23 and nucleolin in mouse early embryos: BIGGIOGERA AND OTHERS 1263

citus inversus

development of handedness in chimeric embryos: Brown
AND OTHERS 949

Skeletal muscle

cardiac troponin T: SAGGIN AND OTHERS 547

Skin

rat

wound healing: 671

snail

cell shape changes in *Drosophila* gastrulation: LEPTIN AND GRUNEWALD 73

Somatostatin

receptors in osteogenesis: MACKIE AND OTHERS 1233

Somite

expression of N-myc in Xenopus: VIZE AND OTHERS 885

Sorting

polysialic acid and N-CAM in rat kidney: LACKIE AND OTHERS 933

Spatial regulation

cell patterning and segment polarity gene patched: HIDALGO AND INGHAM 291

Spec

genes

transcription of a USF-like protein in sea urchins: TOMLINSON AND OTHERS 259

Species-specific monoclonal antibody

spinal tract formation in chick-quail chimeras: TANAKA AND OTHERS 565

Spermatogenesis

mouse

translational regulation of cytochrome c genes: HAKE AND OTHERS 249

Spermatogonia

mouse

of c-kit encoded at W locus: MANOVA AND OTHERS 1057

Spermatozoa

human

acrosome reaction and acrosin activation in human spermatozoa: TESARIK AND OTHERS 391

sperm factor stimulates calcium increase in hamster egg: swann 1295

Spina bifida

craniorachischisis in mouse chimeras: MUSCI AND MULLEN 229

Spinal tract

formation in chick-quail chimeras: TANAKA AND OTHERS 565

Stable intron

pattern of transcription of *Delta* in *Drosophila*: Haenlin and others 905

Stalk

cell formation in *Dictyostelium*: kwong and others 303

Stem

cell

a review: POTTEN AND LOEFFLER 1001
derivation in DIA/LIF: NICHOLS AND OTHERS 1341
mouse embryo colonization: LALLEMAND AND BRULET
1241

Stem cell

embryonic

-derived mouse fetus: NAGY AND OTHERS 815

Storage protein

gene expression and mitotic activity: HAUXWELL AND OTHERS 283

Stromal cell

mouse fetal liver erythropoietic microenvironment:
OHNEDA AND OTHERS 379

Surface

cell

and tracheal morphogenesis in Manduca: NARDI 681

Synapse

deposition of postsynaptic basal lamina: SWENARCHUK AND OTHERS 51

Synthesis

protein

nonspecific effects of oligo injection: SMITH AND OTHERS 769

Target

recognition

plasticity in retinotectal projection: ICHIO AND OTHERS

TC cell (See transient catecholaminergic cells)

Teleost

embryo

HNK-1-immunoreactive neural crest cells: SADAGHIANI AND VIELKIND 197

Tenascin

and peripheral nerve growth: WEHRLE AND CHIQUET 401

Teratogenesis

retinoic acid-binding sites and CRABP expression: DENCKER AND OTHERS 343

Terminal system

Drosophila

pattern formation: casanova 621

Testis

masculinization of rat fetal ovary: CHARPENTIER AND MAGRE 839

Testis-specific gene

translational regulation of mouse cytochrome c genes during spermatogenesis: HAKE AND OTHERS 249

Tetraploid

mouse embryo

postimplantation development: KAUFMAN AND WEBB 1121 stem cell-derived fetus: NAGY AND OTHERS 815

TGFB

family - RNA expression during murine embryogenesis: PELTON AND OTHERS 609

isoforms in human embryogenesis: GATHERER AND

TGFB3

RNA expression during murine embryogenesis: PELTON AND OTHERS 609

Three-dimensional imaging

microtubule interphase array in plant cells: FLANDERS AND OTHERS 897

Three-dimensional reconstruction

cellular migration patterns in mouse cerebral cortex: AUSTIN AND CEPKO 713

Thyroid

Pax8 expression in murine embryogenesis: PLACHOV AND OTHERS 643

Tissue

organisation

stem cells: POTTEN AND LOEFFLER 1001

patterns in insect epidermis: NUBLER-JUNG AND mardini 1071

-specific expression of Hox-2.3: vogels and others 1159

Topographic map

plasticity of target recognition in retinotectal projection: ICHIJO AND OTHERS 331

Tracheae

cell recognition and tracheal morphogenesis in Manduca: NARDI 681

Transcription

cyclin B transcript localization in Drosophila: RAFF AND OTHERS 1249

differential pattern of RARs and retinoid binding proteins: DOLLE AND OTHERS 1133

factor

of USF-like protein in sea urchins: TOMLINSON AND OTHERS 259

Xenopus embryonic HSF activation: OVSENEK AND HEIKKILA 427

of PSBP gene in rats: TAKEDA AND OTHERS 273 pattern for Delta in Drosophila: HAENLIN AND OTHERS 905

run-on

in Caenorhabditis: SCHAUER AND WOOD 1303

Transcriptional regulation

hairy stripe regulation in Drosophila: HOWARD AND STRUHL 1223

Transforming growth factor (See TGF)

Transgenic mouse

developmental regulation of yF-crystallin promoter: YU AND OTHERS 131

Transient catecholaminergic cells

in murine gut: BAETGE AND OTHERS 689

Transient phenotypic expression

catecholaminergic cells: BAETGE AND OTHERS 689

Transition

midblastula

Xenopus embryonic HSF activation: OVSENEK AND HEIKKILA 427

Translational regulation

of mouse cytochrome c genes during spermatogenesis: HAKE AND OTHERS 249

Transport

membrane

mouse placental Ca²⁺-ATPase: TUAN AND BIGIONI 505

Trigeminal ganglion

zebrafish primary neurons express HNK-1: METCALFE AND OTHERS 491

Trophectoderm

polar

an extra maternally derived X chromosome and mouse development: SHAO AND TAKAGI 969

Trophoblast

horse

Major Histocompatibility Complex expression: DONALDSON AND OTHERS 63 mouse placental Ca²⁺-ATPase: TUAN AND BIGIONI 505

Trophoderm

pig

growth factor receptors: corps and others 221

Troponin T

cardiac, in rat skeletal muscle: SAGGIN AND OTHERS 547

cloned gene complements brown mutation: BENNETT AND

twist

cell shape changes in Drosophila gastrulation: LEPTIN AND GRUNEWALD 73

Two-cell embryo

postimplantation development of tetraploid mouse: KAUFMAN AND WEBB 1121

Tyrosine hydroxylase

transient catecholaminergic cells: BAETGE AND OTHERS 689

Ultrabithorax

function in Drosophila embryogenesis: GOULD AND OTHERS 1319

homeotic genes regulate growth factor homologs: REUTER AND OTHERS 1031

interactions between dpp and homeotic genes: PANGANIBAN AND OTHERS 1041

USF

transcription factor in sea urchin embryonic ectoderm:
TOMLINSON AND OTHERS 259

Vagus nerve

mouse

transient catecholaminergic cells: BAETGE AND OTHERS
689

Vector

cloned gene complements brown mutation: BENNETT AND OTHERS 471

Vertebral abnormality

postimplantation development of tetraploid mouse embryos: KAUFMAN AND WEBB 1121

Vesicle

otic

retinoic acid and c-fos: REPRESA AND OTHERS 1081

Vimentin

expression in mouse erythropoiesis: Sangiorgi and others 85 in *Xenopus* oocytes: Torpey and others 1185

Visceral mesoderm

homeotic genes regulate growth factor homologs: REUTER
AND OTHERS 1031

interactions between *dpp* and homeotic genes: PANGANIBAN AND OTHERS 1041

Visceral muscle

mesoderm-specific homeobox gene: BODMER AND OTHERS 661

Voronoi

lateral inhibition of differentiation: HONDA AND OTHERS 1349

WEHI 3 cell

activin A is a mesoderm-inducing factor: Albano and others 435

Whole mount

in situ hybridization localization of mRNAs in Xenopus: HEMMATI-BRIVANLOU AND OTHERS 325

wingless

homeotic genes regulate growth factor homologs: REUTER AND OTHERS 1031

W locus

of c-kit encoded at mouse: MANOVA AND OTHERS 1057

Wound

healing in rat skin: 671

X-chromosome

inactivation and mouse development: SHAO AND TAKAGI 969

Xenopus

axis determinant in dorsal cytoplasm: YUGE AND OTHERS 1051

brain

ontogeny of POMC expression: HAYES AND LOH 747 comparison with *Gastrotheca* cleavage pattern: Del Pino AND LOOR-VELA 781

embryo

activin A is a mesoderm-inducing factor: Albano and Others 435

ectopic expression of N-cadherin: FUJIMORI AND OTHERS 97

expression of N-myc: VIZE AND OTHERS 885

heat-shock transcription factor activation: OVSENEK AND HEIKKILA 427

localization of mRNAs in whole mounts: HEMMATI-BRIVANLOU AND OTHERS 325

mechanics of notochord: Adams and others 115 protein kinase C: Otte and others 461

heart

xyloside eliminates cardiac asymmetry: YOST 865 induction of amphibian organized neural system: YAMADA 653

muscle

sexually dimorphic myogenesis in frogs: BAETGE AND OTHERS 689

oocvto

nonspecific effects of oligo injection: SMITH AND OTHERS 769

regulation of ornithine decarboxylase: BASSEZ AND OTHERS 955

vimentins: TORPEY AND OTHERS 1185

Xhox 3

induction of amphibian organized neural system:

Xiphophorus

HNK-1-immunoreactive neural crest cells: SADAGHIANI AND VIELKIND 197

XTC-MIF

activin A is a mesoderm-inducing factor in Xenopus:
ALBANO AND OTHERS 435

Xyloside

eliminates cardiac asymmetry in Xenopus: YOST 865

Y prob

gastric endocrine origin: THOMPSON AND OTHERS 477

Zinc finger

proteins

 $sry \ eta$ and $sry \ \delta$ expression and binding to chromosomes in Drosophila: Payre and others 141

Zygotic activity

of nullo in Drosophila: SIMPSON AND WIESCHAUS 851

